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# Promotion of Advance Care Planning for Individuals Experiencing Homelessness

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Promotion of Advance Care Planning for Individuals Experiencing Homelessness:

A Doctor of Nursing Practice Project

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### Abstract

Vulnerable populations in the United States experience disparities in access to advance care planning and may have significant unmet healthcare needs at the end of life, including unrelieved suffering. People who are homeless have increased morbidity and mortality risks, yet lack opportunities to discuss end-of-life preferences. A Doctor of Nursing Practice project consisted of designing, implementing, and evaluating an educational intervention in two settings for nurse practitioners and other clinicians on advance care planning with individuals experiencing homelessness. The intervention was associated with increased knowledge and confidence in advance care planning ability. Participants expressed positive intention to change individual practice based on learnings. Lack of time and patient discomfort with end-of-life topics were identified as barriers to changing practice regarding advance care planning. Educational interventions on advance care planning for clinicians were effective and may help to increase patient access to this important component of care. Advance care planning is a crucial antecedent to receiving patient-centered care at the end of life, particularly for vulnerable populations.

Key words: homeless persons, death, decision making, vulnerable populations

## Promoting Advance Care Planning with Individuals Experiencing Homelessness:

### A Doctor of Nursing Practice Project

In the 2014 report, *Dying in America*, the Institute of Medicine (IOM) identified an urgent need for improvement in health care at the end of life (EOL). The IOM called for patient-centered EOL care that honors individual preferences and promotes quality of life. The American Public Health Association ([APHA], 2014) also named unrelieved pain and suffering at the EOL as a priority for public health intervention. The IOM, the APHA, and others have recommended actions to increase public access to advance care planning (ACP) and palliative care options in order to promote patient autonomy, improve symptom management, and reduce costs resulting from unwanted acute care services (APHA, 2014; IOM, 2014; Morhaim & Pollack, 2013).

ACP was endorsed as a standard component of primary care by the IOM and the American Academy of Family Physicians ([AAFP], 2013) and is congruent with the *Standards of Practice for Nurse Practitioners* (American Association of Nurse Practitioners, 2013). However, curricula in medical and nursing education programs have been inadequate to prepare health care providers to engage patients in effective ACP conversations (Dube, McCarron, & Nannini, 2015). Creating opportunities for health care providers to learn about EOL issues and build skill in ACP is an important step toward improving EOL care (IOM, 2014).

Advance directive (AD) completion is a core component of ACP, important both for the designation of surrogate decision makers and the documentation of treatment preferences. In addition, the process of ACP includes education on EOL care options and ongoing discussions regarding individual values and treatment goals (Lum, Sudore, & Bekelman, 2015; National Hospice and Palliative Care Organization, 2016). See Appendix A for definitions of key terms.

ACP is appropriate for all adults, but has not been implemented equitably across social groups. Vulnerable populations, including those with low socioeconomic status, ethnic and racial minority groups, and people who are homeless are less likely to have access to ACP (IOM, 2014; Leung, Nayyar, Sachdeva, Song, & Hwang, 2015). Lack of access to primary care, where ACP is more likely to be offered than in emergency or urgent care settings, is a likely barrier to ACP for many. Additional barriers to ACP for people who are homeless include lack of continuity of care, mistrust of providers, and resource limitations of settings providing care to homeless populations. Also, health care providers may assume people who are homeless to be uninterested in ACP and fail to initiate discussions (Song, Ratner, & Bartels, 2005).

ACP is arguably of particular importance for homeless persons because of their poorer health trajectories. Compared to general populations, people experiencing homelessness are at greater risk for life-threatening illness and death, with mortality rates 4.5-9.6 times higher in younger homeless adults (Baggett et al., 2013; Morrison, 2009). Comorbidities are also more likely to occur in homeless persons, including higher rates of mental illness, substance use disorders, and geriatric functional syndromes (Morrison, 2009; Brown, Kiely, Bharel, & Mitchell, 2012). People who are homeless may be less likely to have family members or other surrogate decision-makers present at EOL (Song et al., 2007). ADs may, for homeless individuals lacking social support, be the only means of communicating treatment preferences should they become incapacitated (Song et al., 2010). Discussing EOL preferences with health care providers and completing ADs are important ways for homeless individuals to advocate for themselves and preserve autonomy within healthcare systems.

The Doctor of Nursing Practice (DNP) project described in this paper involved the design, implementation, and evaluation of an educational intervention for nurse practitioners



(NPs) and other clinicians in primary care and public health settings to promote ACP for individuals experiencing homelessness. See appendix B for the DNP project approval form.

### **Problem Description**

Homelessness is a growing problem in Marin County, California. A biennial homeless census undertaken by the county showed an increase in homeless persons from 937 in 2013 to 1309 in 2015 (Halstead, 2015). Sixty-six percent of the total homeless population was unsheltered and nearly half were located in the city of San Rafael (Applied Survey Research, 2015).

Opportunity Village Marin (OVM), a non-profit organization in Marin County was identified as the initial site for project implementation. OVM was founded by public health nurse and University of San Francisco (USF) alumna Rita Widergren in 2014. OVM supports individuals experiencing homelessness by providing “targeted, low barrier, transitional housing & interdisciplinary services” including medical case management, temporary housing, and support in finding permanent housing (OVM, n.d., para. 1). Clients are typically referred to OVM following hospital discharge and are not appropriate candidates for the area’s shelters due to chronic disease and medication needs, frailty, or alcohol use (R. Widergren, personal communication, February 17, 2017). OVM staff and volunteers, most of whom are nurses, assist clients by scheduling medical appointments and accompanying clients as needed, acquiring medications, scheduling visits from a substance abuse counselor, assisting with food and transportation needs, providing emotional support, and working to connect clients to permanent housing and social services. A gap analysis revealed that ACP was not provided by OVM (R. Widergren, personal communication, November 14, 2016). See also appendix C and Section III, Interventions, for more information on gap analysis.

### **Available Knowledge**

Because limited research is available on homelessness and ACP, the literature review required an exploratory PICOT question: What is known about ACP (I) in homeless populations (P)? The DNP student reviewed multiple study designs in order to develop an understanding of homeless EOL planning needs. A search of CINAHL Complete, PubMed, PsycINFO, Cochrane Database of Systematic Reviews, ERIC, SocINDEX, and Joanna Briggs Institute EBP Database using keywords *homeless*, *advance care planning*, and *end of life* yielded nine articles that met inclusion criteria: peer-reviewed, original research reports describing community-based ACP interventions in homeless populations or studies of EOL attitudes among people experiencing homelessness. Studies conducted in inpatient settings and studies focused on the provision of palliative care were excluded. The DNP student evaluated the selected articles using the Johns Hopkins Nursing Research Evidence Appraisal Tool (Dearholt & Dang, 2012). See Appendix D for study descriptions and quality ratings.

### **Advance Care Planning Interventions in Homeless Populations**

Two randomized controlled trials tested ACP interventions in homeless populations in Minnesota. Researchers randomized participants in each study into either a clinician-guided ACP intervention group or a self-guided intervention group relying on written materials (Song et al., 2008; Song et al., 2010). Clinician-guided intervention groups attained significantly higher AD completion rates (37.9% and 59%) than self-guided groups (12.8% and 30%; Song et al., 2010; Song et al., 2008). The overall AD completion rates of 26.7% and 44% were comparable or higher than AD completion rates in the general population (Jezewski, Meeker, Sessana, & Finnell, 2007; Song et al., 2008; Song et al., 2010).

A quasi-experimental design trial explored an intervention wherein 205 homeless shelter residents in Toronto, Canada received ACP counseling from medical students and physicians. More than half of participants opted to complete an AD during the single counseling intervention (Leung et al., 2015).

Surrogate decision-makers were designated by 87% (Song et al., 2010) and 61% (Leung et al., 2015) of participants in two studies. Song et al. (2008) reported decreased worry about death among participants who returned for follow-up interviews three months after intervention with greater differences observed among those who had completed an AD compared to those who had not (Song et al., 2008). However, the 59% attrition rate affecting this variable impairs interpretability of this finding. In the quasi-experimental study, a survey revealed that 74.5% of those who completed an AD reported feeling “at peace” after the intervention (Leung et al., 2015, p. 751).

### **End-of-Life Concerns and Preferences of Homeless Individuals**

Six qualitative studies explored attitudes, fears of homeless participants regarding death and care at the end of life. Two studies relied on individual interviews of homeless persons in transitional housing (Ko & Nelson-Becker, 2014; Ko, Kwak, & Nelson-Becker, 2015) and three studies gathered data from focus groups conducted at service agencies (Tarzian, Neal, & O’Neill, 2005; Song et al., 2005; Song et al., 2007). One study (Bartels et al., 2008) consisted of a qualitative content analysis of ADs completed during the guided intervention described by Song et al. (2008). In order to identify themes, a grounded theory approach was used in two studies (Ko & Nelson-Becker, 2014; Ko et al., 2015), a consensual qualitative research approach was used in one (Song et al., 2007), and the remaining studies described methods of analysis of

transcribed recordings (Tarzian et al., 2005; Song et al., 2005) or written ADs (Bartels et al., 2008).

Participants expressed that EOL topics were uncomfortable and provoked intense emotion (Ko & Nelson-Becker, 2014; Song et al., 2005; Tarzian et al., 2005). They also expressed fears of dying alone or potentially unnoticed (Bartels et al., 2008; Song et al., 2005; Song et al., 2007) and associated dying alone or estranged from family as characteristic of “bad” death (Ko et al., 2015). Some participants desired reconciliation with family members prior to death (Ko et al., 2015; Song et al., 2007), but many others voiced strong opposition to reconnecting with family or allowing family to be contacted in the event of severe illness or death (Bartels et al., 2008; Song et al., 2007). Intense fear or concern over dying violently was an important finding in two studies (Song et al., 2005; Ko et al., 2015). Religion emerged as a theme in shaping EOL decisions (Tarzian et al., 2005), including perceptions of God as controlling events at the EOL (Ko & Nelson-Becker, 2014; Song et al., 2005). Spiritual connection was also an important component of a “good” death for some participants (Ko et al., 2015).

Participants across studies expressed a range of views about health care providers, with some trusting the judgment of physicians to make decisions about EOL care (Ko & Nelson-Becker, 2014) and others perceiving providers as overly controlling (Song et al., 2007) or likely to deny homeless individuals appropriate care at EOL (Tarzian et al., 2005). Preferences in health care or burial related to veteran status varied, with some finding comfort in the availability of veterans’ care and burial options (Ko et al., 2015; Song et al., 2007). Some participants felt that ACP was not a priority, given the pressing needs of daily survival (Ko & Nelson-Becker, 2014). However, others expressed that their vulnerability (Ko & Nelson-Becker, 2014) or

concerns regarding disrespect or mistreatment from health care providers (Tarzian et al., 2005) rendered advance care planning all the more important.

Many participants had significant experiences with death, had witnessed violence, or had experienced violence personally (Song et al., 2007; Tarzian et al., 2005). Experiences of trauma, loss, and discrimination or mistreatment from health care providers often shaped views of death and EOL care for homeless research participants (Ko et al., 2015; Song et al., 2007; Tarzian et al., 2005). Because homeless individuals are likely to have histories of trauma, researchers in two studies urged clinicians to broach EOL topics with utmost sensitivity (Tarzian et al., 2005; Song et al., 2007).

### **Evidence Summary**

In summary, researchers investigating ACP interventions in homeless populations have reported high rates of AD completion, 27-50% overall, with even higher rates for clinician-assisted intervention groups (Leung et al., 2015; Song et al., 2008; Song et al., 2010). ACP interventions also resulted in high rates, 61-87%, of surrogate decision-maker designation (Song et al., 2010; Leung et al., 2015). Completion of ADs may also relate to decreased worry and increased peace of mind for homeless individuals (Leung et al., 2015; Song et al., 2008). Homeless focus-group participants expressed ranges of preferences regarding EOL care, reporting concerns both about prolonged life support and about being denied care even if they had a good chance of recovery (Song et al., 2005; Tarzian et al., 2005). Many participants shared concerns regarding familial relationships, fears of dying alone, and concerns about burial (Song et al., 2005; Song et al., 2007). Researchers' common recommendations for clinicians included approaching EOL topics with sensitivity and recognizing the importance of religion for many individuals (Tarzian et al., 2005; Ko & Nelson-Becker, 2014; Song et al., 2007).

A number of factors limit the generalizability of the individual studies, including small sample sizes, demographic characteristics of the participants, and attrition. Participants in all of the studies were recruited from social service agencies and temporary housing sites and may differ significantly from other homeless populations, including those that do not access services. Perspectives of transitional housing residents may differ from those of homeless individuals in less stable settings.

### **Practice Implications**

The evidence reviewed has a number of practice implications for clinicians engaging in ACP with homeless clients. Results from the trials of ACP interventions suggest that clinicians should discuss ACP with homeless clients and guide them through documents rather than simply providing written materials. Clinicians should include an inquiry about surrogate decision makers in ACP discussions. Because discussing death was challenging and provoked emotional responses from homeless study participants, Tarzian, Neal, and O'Neill (2005) recommended normalizing ACP and asking permission to discuss EOL issues.

ACP discussions with individuals experiencing homelessness may need to address EOL issues of particular concern to this group. For example, clients may have questions about assisted dying or burial/cremation practices for unclaimed bodies. Clinicians should familiarize themselves with state and local laws governing these practices as considerable variation exists. Additional relevant topics to explore with homeless individuals may include feelings about veterans' care and burial options and preferences regarding notification of family members or others in the event of serious illness or death (Song et al., 2007). Because personal items such as wallets and identification cards may be lost or stolen, clinician documentation of scars, tattoos, or other physical characteristics may help to identify the individual when deceased or

incapacitated (Song et al., 2007). Finally, completed ADs must be accessible if documented preferences are to be followed. Because retaining paper documents is problematic for clients who are homeless, local electronic storage options for ADs should be used when available. Another solution to this problem, proposed by National Health Care for the Homeless Council (2016), is for health care providers and organizations to share completed ADs with one another, given client consent. For example, with the agreement of all participants completing ADs, Song et al. (2010) provided copies of the completed documents to the two area hospitals most likely to provide future care to the participants.

### **Rationale**

Decreased life expectancy in homeless populations and lack of social support, including estrangement from relatives, render ACP an urgent need in this population (Song et al., 2007). However, many healthcare providers lack training in ACP and may be uncomfortable initiating EOL discussions (Chung, Oczkowski, Hanvey, Mbuagbaw, & You, 2016). Educational interventions for physicians have resulted in increased knowledge, self-efficacy, and communication skill in ACP (Chung et al., 2016). NPs who have received education or training on EOL topics are more likely to engage patients in ACP (Dube et al., 2015). Providing ACP and EOL education to public health nurses and NPs who provide case management or outpatient care for homeless persons may be an effective strategy for increasing the frequency of EOL conversations and ACP with this vulnerable population.

### **Advance Care Planning Literature**

In order to develop an intervention based on a synthesis of current knowledge of ACP, the DNP student also explored literature on ACP concepts, ethical and theoretical frameworks, and conversational techniques. This section will review changes in definitions of ACP and

innovative recommendations for ACP implementation that informed the design of the project intervention.

**Beyond advance directives.** As described previously, the ACP interventions tested with homeless research participants consisted of single counseling sessions or self-guided use of written materials. The goal of the interventions was to facilitate completion of ADs. However, some ACP experts recommend broader conceptions of ACP that include but are not limited to completing ADs (Sudore & Fried, 2010; Winzelberg, Hanson, & Tulsky, 2005). Preparing for future “in-the-moment” decision making and identifying individual decisional control preferences should also be included in ACP. Rather than attempting to initiate and conclude ACP in a single conversation, as in the interventions trialed with homeless persons, many experts recommend that ACP occur as a process that continues over many healthcare encounters and among patients, families, and communities (IOM, 2014; Lum et al., 2015).

Engaging in multiple ACP conversations over time may help prepare patients and surrogates to make health care decisions at the time the need arises (Sudore & Fried, 2010). Such preparatory conversations may or may not result in the completion of ADs, but may focus instead on the identification and revision of treatment goals and the communication of values to surrogates, loved ones, and care providers. Discussing preferred and unacceptable states of health may be more fruitful than discussing preferences for specific health care interventions, particularly for those who are in relatively good health. The process of formulating life priorities and defining undesired states of health may be valuable not only in completing ADs, but also in preparing patients and surrogates to be ready to make better health care decisions when needed in the future (Sudore & Fried, 2010).



**Autonomy and decisional control.** Promoting and preserving patient autonomy has been the primary ethical motivation for ACP. Autonomy, however, is a term with many different potential meanings, depending on the context of its use. In ethics, autonomy is typically used in one of two ways. Autonomy as *respect for persons* refers to recognizing the full value and dignity inherent in human beings (Grace, 2014). The second meaning, autonomy as *self-determination*, refers to the value of making one's own decisions and thereby shaping one's destiny and way of being in the world (Grace, 2014). Both meanings of autonomy apply to ACP and EOL care, though autonomy in the sense of self-determination is more often the focus of discourse.

Patient autonomy at EOL typically manifests as the ability to refuse medical treatment while incapacitated via previously completed ADs. For some, preservation of autonomy (self-determination) at EOL in this manner may be a compelling motivator to participate in ACP and complete ADs. However, the importance of autonomy varies considerably among individuals, families, and cultures (Winzelberg et al., 2005). When shared decision-making is the cultural norm, attempting to elicit individual care preferences is unlikely to be fruitful or well-received. Discussing individual preferences for whom to include in decision-making may be a useful approach. This may include not only a single appointed surrogate, but also larger family groups, clergy, and medical professionals. Cultural differences in preferences for decisional control may explain some variation in AD completion rates observed in different races and ethnicities (Perkins, Geppert, Gonzales, Cortez, & Hazuda, 2002).

**Health behavior.** Patient participation in this ACP process has been described as a health behavior by researchers (Fried, Bullock, Iannone, & O'Leary, 2009). The transtheoretical model of behavior change was developed to guide behavior change in the area of substance use and

describes a succession of steps in the change process: precontemplation, contemplation, preparation, action, maintenance, and relapse (Prochaska & DiClemente, 1982). Applying the transtheoretical model of behavior change may be helpful to understanding variations in patient readiness and willingness to engage in ACP and for tailoring ACP conversations to fit individual patient needs (Fried et al., 2009; Lum et al., 2015). The stages of change as applied to ACP include *precontemplation*, characterized by lack of awareness of ACP or unwillingness to engage; *contemplation*, characterized by recognizing a need for ACP and/or feeling ambivalent toward ACP; *preparation*, characterized by considering specific actions related to ACP; *action*, characterized by initiating or engaging in ACP conversations and completing ADs; and *maintenance*, characterized by reconsidering goals of treatment and revising ADs (Fried et al., 2009).

**Motivational interviewing.** Motivational interviewing, described by Rollnick, Miller, and Butler (2008), is a method of communication often used with the transtheoretical model to promote behavioral change. Briefly, motivational interviewing consists of eliciting and amplifying individuals' own reasons for changing a behavior. The clinician provides reflective responses that serve to highlight patients' ambivalence and reveal conflicts between patients' stated goals or values and the effects of current behaviors. Rather than telling patients why they should change or adopt a behavior, clinicians guide patients to identify their own motivations for change. These motivations are then reflected back to the patient during the course of the discussion.

Motivational interviewing's emphasis on the patient as the agent responsible for enacting change is highly congruent with ACP's goal of supporting self-determination (Ko, Hohman, Lee, Ngo, & Woodruff, 2016). For patients in the contemplation stage, motivational interviewing

techniques may be particularly helpful to resolving ambivalence toward change. For example, the clinician might begin by inquiring briefly about the patient's reasons for not participating in ACP. Next, the clinician would inquire about reasons the patient might participate in the future. This basic motivational interviewing approach may help patients resolve ambivalence or trigger interest in participating in ACP. A pilot study that used motivational interviewing techniques with ACP in a group of low-income adults demonstrated that the techniques were well-received and most participants progressed to more advanced stages of readiness or action following the intervention (Ko et al., 2016).

As previously mentioned, ACP is not limited to the completion of ADs, but also includes discussions about care preferences or goals of care between patients and loved ones and between patients and health care providers. Researchers have observed that individuals may be in different stages of change for different aspects of ACP simultaneously (Fried et al., 2010). For example, an individual may be in the action stage for discussing preferences regarding life-sustaining treatment with a family member but only in the contemplation stage for discussing the same issues with a health care provider. Providers should not assume, therefore, that patients who are not ready to engage in one aspect of ACP are not be ready for other aspects of ACP.

### **Effective Communication for Advance Care Planning**

Death is a subject that many health care providers and patients find uncomfortable to discuss. Non-verbal and verbal communication techniques may help make discussions of EOL issues more comfortable and more productive. Wasylynuk and Davison (2016) recommended that clinicians adhere to non-verbal communication best practices, including sitting down, maintaining an open posture and comfortable eye contact, leaning forward, and using comforting touch as appropriate. Clinicians should avoid intrusive use of electronic devices, computers, or

papers. Recommended verbal techniques include speaking slowly, inserting frequent pauses, and avoiding medical jargon (Coalition for Compassionate Care of California [CCCC], 2016b; Wasylynuk & Davison, 2016). Asking for clarification and paraphrasing were also recommended both to ensure and to demonstrate clinician understanding of patient statements. Before concluding a discussion, clinicians should inquire about any remaining related concerns or questions (Wasylynuk & Davison, 2016).

Clinicians need not adhere to a particular script for ACP, but some experts have recommended use of particular tactics and phrases to ease comfort of providers and patients. Normalizing the topic of ACP, asking permission or assessing readiness to discuss ACP, and relating ACP to patients' particular health conditions were recommended as potential ways to open ACP discussions (CCCC, 2016b; Lum et al., 2015; Wasylynuk & Davison, 2016). For example, "One thing I discuss with all my patients is advance care planning. Do you know what this is?" is an example of normalizing provided by Wasylynuk and Davison (2016, p. 23). Inquiring about personal experiences with medical decision-making and focusing on goals of care, including any unacceptable states of health, were recommended to help explore patients' values related to health care. "Tell me about the last time you were in the hospital," "What did that time mean to you?" and "What are your biggest fears or worries about the future with your health?" are examples of phrases that may help patients articulate values and goals of care (Wasylynuk & Davison, 2016, p. 23).

### **Exploration of Additional Resources**

Intervention design was informed not only by the literature review but also by training and materials obtained by the DNP student from prominent organizations in the field of EOL care. The DNP student attended a two-day train-the-trainer course on conducting effective

conversations on Physician Orders for Life-Sustaining Treatment (POLST) offered by the Coalition for Compassionate Care of California (CCCC) in July 2016 (see Appendix E for full project timeline. For people with serious, life-limiting illness, POLST forms allow health care providers to order particular levels of medical intervention to align with patient preferences that are valid across different health care settings. The CCCC training included extensive teaching on phrasing and conversational techniques, which were similar to the conversational approaches described by Wasylynuk and Davison (2016) and Lum, Sudore, and Bekelman (2015). Structured role play experiences for attendees provided opportunities to practice conversation skills. Because there is significant overlap between general ACP conversations and POLST conversations, the training was highly relevant to this project.

In addition to attending the training, the DNP student ordered and considered a number of resources from CCCC and Aging with Dignity for inclusion in the intervention toolkit. Discussion guides regarding cardiopulmonary resuscitation, mechanical ventilation, and tube feeding were ultimately excluded from the toolkit for OVM because of their focus on interventions rather than goals of care. ACP conversations should not be intervention-oriented unless patients are seriously ill or raise particular intervention-related concerns (Sudore & Fried, 2010).

Aging with Dignity materials, marketed under the label Five Wishes, were also purchased and considered, including ADs, a discussion guide for health care personnel, and a video guide. In contrast to the CCCC materials, the DNP student found that the Five Wishes materials focused on clarifying values and goals of care. They also provided opportunities to specify preferences for comforting care at EOL. However, the materials required a higher literacy level than might reasonably be expected from the homeless population of interest. Even the video required a high

level of engagement with print and was designed for use while reading and completing the Five Wishes AD.

### **Theoretical Bases for the Intervention**

In addition to the transtheoretical model of behavior change discussed previously, Parse's human becoming theory and Chochinov's dignity-conserving care model were also used to simultaneously inspire, inform, and support this project. Parse's theory entrusts nurses with the responsibility to bear witness to patient perspectives (Parse, 2010). By engaging the authentic self with what Parse calls *true presence*, the nurse is able to help the patient formulate and communicate his or her values and visions for the future (Parse, 1992). The dignity-conserving-care model encourages kindness and respect on the part of the provider and aims to preserve the autonomy of the patient throughout the lifespan (Chochinov, 2007). Recognition of suffering and affirmation of the full humanity of the person beyond the illness are also important elements of Chochinov's model. Both models support this project as an NP student-led intervention that aims to educate healthcare providers to assist homeless patients in the formulation and expression of personal values and goals of care in order to help preserve autonomy at the EOL.

### **Specific Aims**

The global aim of this project is to increase awareness among NPs, NP students, and public health nurses of the importance of EOL discussions and ACP for all adults and particularly for vulnerable individuals, such as those who are homeless.

The project aim was to promote clinician initiation of EOL discussions and ACP with homeless individuals by implementing and evaluating an educational intervention and toolkit in at least two settings by April 1, 2017.

The intervention aims were (a) to increase clinician knowledge of ACP including EOL concerns common to homeless individuals, (b) to increase clinician confidence in the ability to

engage homeless individuals in ACP discussions, and (c) to increase clinician intention to change practice regarding ACP discussions at one or more settings serving homeless populations.

## **Methods**

### **Gap Analysis**

The desired state is for ACP to be implemented as a standard component of health care for all adults. Involvement of primary care and public health practitioners is necessary (IOM, 2014). The current state of primary care does not include ACP with all adults as standard practice and vulnerable individuals are less likely to be offered ACP (IOM, 2014). Prior to the project, ACP was not included with OVM services. No past or current OVM clients were known to have existing ADs (personal communication, R. Widergren, November 14, 2016). Ritter Center, a key provider of health care to homeless individuals in the area, also did not offer ACP (L. Creasman, personal communication, April 16, 2016).

Educational preparation for health care providers on ACP has been inadequate (Chung et al., 2016) and NPs surveyed have expressed interest in additional ACP training (Dube et al., 2015). Educational interventions in ACP for health care providers that target the particular needs of vulnerable adults, such as those who are homeless, may help to increase implementation of ACP and decrease disparities in access. See also Appendix C for gap analysis table.

### **Context**

The key stakeholder at the primary intervention site, OVM, was the director, Rita Widergren. Additional stakeholders were two USF School of Nursing and Health Professions student volunteers. Widergren was receptive to the idea of incorporating ACP into the services provided by OVM and agreed to help facilitate the DNP project. Widergren suggested, however, that clients new to OVM might benefit from a period of stabilization within the program prior to



initiating ACP. Widergren also recommended that the DNP student begin by conducting ACP conversations herself with the more stable clients.

### **Intervention**

The initial intervention plan consisted of presenting educational seminars to at least two different audiences of health care personnel or students and evaluating changes in knowledge, confidence, and subsequent engagement in ACP conversations with patients/clients. However, due to the stakeholder concerns described above, the DNP student modified the plan to also include direct engagement in a series of ACP conversations with OVM clients. This modification had the benefit of allowing the DNP student to pilot the use of various tools, conversational approaches and phrases, and ADs.

In September 2016, during the early stages of project development, the DNP student implemented a simulation scenario with USF NP students in an advanced assessment course. The DNP student gave a brief presentation on homelessness and ACP and provided a handout with key points prior to the scenario. Two students successfully conducted an ACP conversation with a standardized patient who was homeless, using the methods recommended by the DNP student. The DNP student then facilitated a group discussion with the students following the simulation experience. This educational intervention at USF was a precursor to the more robust intervention that was ultimately implemented at OVM and at a California Association for Nurse Practitioners (CANP) conference and is the subject of this paper.

**Individual advance care planning with Opportunity Village Marin clients.** Following a series of visits during which the DNP student became acquainted with the OVM clients and began to build rapport, she engaged the clients in a number of EOL conversations. Clients were found to be in varied stages of readiness for ACP and discussion strategies were individualized

accordingly. Using phrases and tactics from the literature and the CCCC training, the DNP student began with general inquiries about health concerns and then proceeded to discuss proxy decision-makers and goals of care when appropriate. Three clients, S., C., and R., participated in detailed discussions regarding their current health problems and goals of care. R. believed he already had an AD on file from years prior and declined to complete a new form. One client, T., stated that he knew it was important to complete an AD and disclosed a tragic personal experience with medical decision-making that shaped his views. S., C., and T. were able to identify suitable decision-makers, though T. did not have current contact information for his. Three other clients, L., B., and J., were introduced to the topic and invited to discuss health concerns and general feelings about quality of life. S. and C., a sibling pair with adequate levels of literacy, were provided with ADs, which they stated they would discuss and fill out together.

***Lessons learned.*** The DNP student's ACP conversations with OVM clients informed the final design of the toolkit and seminar via a number of lessons learned. First, it was helpful to be familiar with a variety of potential phrases and approaches for initiating conversations. Each person and situation is unique and, therefore, a single way of phrasing a question will not be appropriate for everyone. The DNP student also found that having a variety of questions and phrases ready also allowed for natural transitions into ACP from other health-related discussions. Overt ACP questions also were appropriate at times. Being familiar with gentle phrasings, such as those suggested by Wasylynuk and Davison (2016) helped these conversations flow smoothly from the DNP student's point of view.

Second, as discussed previously, intervention-focused handouts were found to be of limited usefulness. Though the DNP student frequently carried these tools when visiting clients, they were not suitable for most discussions. Most conversations centered around concerns,

hopes, values, and goals for care rather than intervention preferences. However, intervention-focused handouts may be useful for seriously ill individuals, such as those for whom a POLST form would be appropriate. These tools may be best suited for use by NPs and other health care providers treating persons with life-limiting illness.

Third, ADs should always be available during ACP conversations. Though many OVM clients were not ready to look at an AD during an initial or early discussion, others were eager for the opportunity to read and consider them. The low-literacy California Advance HealthCare Directive, available as a free download from [www.iha4health.org/our-services/advance-directive/](http://www.iha4health.org/our-services/advance-directive/) has engaging pictures and text that these clients found very appealing and easy to understand. The DNP student was grateful to have copies of this document on hand.

**Toolkit design and content.** Following the DNP student's pilot ACP conversations with OVM clients, she consulted with the OVM director regarding intervention format. The DNP student drew from evidence on homeless concerns at EOL, ACP interventions with homeless populations, developments in ACP frameworks and approaches, and communication techniques to develop the content of the toolkit. The resulting ACP toolkit consisted of a spiral-bound collection of resources that included basic information about ACP, tips for conducting effective discussions, information specific to ACP with homeless clients, sample AD forms with information about their use, and internet resources.

In addition to the spiral-bound toolkit, the DNP student created client toolkits for use at OVM. Each client toolkit consisted of a sturdy folder containing a full-color low-literacy California Advance Health Care Directive and one page of introductory information on ACP in a frequently-asked-questions format. The client handout was assessed to be below 6<sup>th</sup> grade reading level using the Microsoft Word readability tool. Reading levels of 5<sup>th</sup>-6<sup>th</sup> grade are

recommended for health education documents (Page, n.d.). See Appendix F for depiction of the work breakdown structure and appendix G for intervention materials.

**Seminar design, content, and implementation.** The DNP student conducted a seminar on March 3, 2017 at OVM, which included the pre-test, a presentation, ACP discussion role play, group discussion, and post-test. The OVM director was given the spiral-bound ACP toolkit and 10 client toolkits. The other two attendees, OVM volunteers who were also USF graduate students, received a stapled version of the ACP toolkit.

Didactic content of the seminar was similar to that of the toolkit. During the role play segment, each participant had an opportunity to play the role of a homeless client and to play the clinician. A brief scenario with character description, health information, and quotes or instructions for responding to ACP queries was provided to participants playing client roles. Scenarios were created by the DNP student with some elements based on actual clients. Those in clinician roles had the option to the suggested ACP phrases in the toolkit for assistance. The DNP student facilitated a group discussion following the role play during which she solicited input from participants about their experiences and highlighted key aspects of each case to reinforce learning.

The second seminar was implemented March 19, 2017 at the CANP educational conference in Burlingame, California. It was similar in content and structure to the OVM seminar. However, for the CANP audience, additional content relevant to NPs on POLST and on reimbursement was included. In lieu of paper ACP toolkits, seminar attendees had access to slides used in the presentation. A handout of suggested phrases for use in ACP conversations was also distributed to attendees along with case descriptions to assist in the role play portion.

Handouts from CCCC as well as copies of the California Advance HealthCare Directive, Five Wishes, and POLST forms were also made available for interested attendees.

**Project timeline.** Project development began in spring of 2016 with an initial literature review, project proposal draft, and consultations with faculty. Approval to implement the project at OVM and at USF via a simulation scenario during a course for NP students was obtained in June of 2016 (J. Loomis, personal communication, June 21, 2016). The project prospectus was approved in July of 2016 and the DNP student attended the CCCC training that same month. The DNP student researched intervention design during the fall of 2016 and began working with Widergren at OVM. Pilot ACP conversations took place during January and February of 2017. The DNP student explored an additional site, Enterprise, a day program primarily for people with mental health conditions, in San Rafael. This site was ultimately not included in the project because of its different population focus. Also during early 2017, the intervention was finalized, including the toolkit, seminar plan, presentation slides, handouts, and assessments. See Appendix E for Gantt chart.

**Strengths, weaknesses, opportunities, threats.** A strengths, weaknesses, opportunities, and threats (SWOT) analysis of the project was largely favorable. See Appendix H for SWOT figure. For the OVM arm of the project, the congruence of the organizational mission with the project was a continuing strength. OVM committed to continuing ACP as a standard component of services (Rita Widergren, personal communication, March 3, 2017). Also, the well-established relationship between USF and OVM was an asset to the project. USF students gain experience by volunteering at OVM and the students' efforts support OVM's work. Also, OVM has a strong relationship with the Marin County Department of Aging and Adult Services. Widergren shared information about this project with the County agency's leaders, after which the agency

requested numerous copies of the ACP toolkit from the DNP student for use by Marin County public health nurses. The DNP student gladly provided these materials to support expanded access to ACP in the community.

The NP arm of the project also had a number of strengths and opportunities. The initial project plan was to implement the educational intervention in the local area or at USF. However, the acceptance of the DNP student and her advisor as speakers at the CANP conference allowed the project intervention to reach NPs not only from the Bay Area, but from throughout the state. Availability of the USF simulation lab and the expertise of the DNP student's advisor in simulation provided the opportunity to include simulation as an early component of the project.

For NPs, developments in reimbursement, scope of practice, and legal EOL options may have helped to create interest in continuing education on EOL issues. As of January 1, 2016, California NPs and physician assistants were permitted to sign POLST forms in California (CCCC, 2015). Also in California, the legalization of physician aid-in-dying went into effect on June 9, 2016. The availability of this new option again placed EOL care in the spotlight as an area in need of training programs for providers (CCCC, 2016c). The project did not include specific content on the aid-in-dying law, but the DNP student was prepared to address questions on the subject at the seminars if needed.

Most significantly, Medicare as of January 1, 2016 provides reimbursement for ACP, which may be billed as a distinct service or may be included in an annual wellness visit (Centers for Medicare and Medicaid Services, 2016). California also recognizes the same billing codes for ACP in MediCal (State of California, 2017). Documents need not be completed in order to bill for the service; rather, discussion about EOL options and preferences must simply be initiated. To be eligible for reimbursement, ACP must be conducted face-to-face by a provider with the

patient or proxy decision-maker in a clinic setting. ACP by OVM staff would therefore not be reimbursable, but ACP by NPs in clinical practice would qualify. The ability to bill for EOL discussions, at least for Medicare and MediCal patients, is a significant opportunity that may support NP willingness to incorporate ACP into practice.

**Project budget.** Out-of-pocket expenses totaled \$1614, with approximately half attributable to the cost of attending the CANP conference. The CCCC POLST training workshop was another significant expense, at \$200. The remaining expenses consisted of handouts, AD forms, and costs related to printing.

The time value of personnel involved with the project was arguably the most costly aspect of the project. Using the DNP student's hourly rate, her time value was calculated at \$24,700. Based on Bureau of Labor Statistics (2017) data on San Francisco area NP wages, the time value of seminar participants and collaborators amounted to \$4,827. The total cost of time and out-of-pocket expenses totaled \$31,141. See Appendix I for budget detail.

**Cost benefit analysis.** Return on investment for CANP seminar attendees may be estimated based on potential increases in revenue from reimbursed ACP. Reimbursement for ACP with Medicare patients is \$86 for the initial 30 minutes during a visit and \$75 for each subsequent 30-minute period of time (CCCC, 2016a). For a single seminar attendee, the time-value cost is \$113. This cost could be offset by as few as two reimbursed sessions of ACP. An NP who bills incident to a physician for one 30-minute ACP encounter per week would generate \$4128 in annual revenue (assuming 48 working weeks) for his or her practice. At the lower MediCal rates (\$69.59 for the initial 30 minutes and \$62.04 for each subsequent 30 minutes), the NP would generate \$3340 after a year of weekly ACP billing (State of California, 2017). For the

total cost of the project, breakeven would occur after 363 Medicare-reimbursed sessions or 445 MediCal reimbursed sessions. See Appendix J for cost-benefit analysis table.

**Cost avoidance.** ACP may also result in avoidance or reduction of acute care costs. Individuals who have completed ADs or have become familiar with EOL options via ACP may avoid unwanted hospital admissions or opt for palliative care earlier during the course of a serious illness. Researchers have estimated that for a patient with severe lung disease, avoidance of a single intensive care unit admission with an average duration of 6.5 days would save \$38,000 in hospital costs (Khandelwal et al., 2016). Therefore, avoidance of a single admission of this type would result in a positive return on the total project investment (see Appendix I). Alternatively, a reduction in length of stay by 1.7 days in an intensive care unit as the result of a palliative care consultation was calculated to save \$6,100 in costs of care (Khandelwal et al., 2016).

It is important to note that the goal of this project was not to reduce costs of care via ACP, but rather to expand access to ACP to allow for congruence between patients' values and preferences and their care at EOL. However, it is also incumbent upon health care providers across settings to conserve resources and to ensure that medical treatments are employed to the benefit, not burden, of individual patients and of society as a whole. It is the DNP student's intention to draw attention to the potential monetary value of increasing ACP not as an impetus for action, but rather to illustrate that cost should not be a barrier to implementing ACP interventions.

**Responsibility and communication plan.** The DNP student had primary responsibility for the design of the intervention, including evidence synthesis, development of didactic content, toolkit design, and development of evaluation methodology. The OVM director was the key



stakeholder in design of the intervention for that setting and was consulted regarding design of the seminar and toolkit. The DNP student and OVM director communicated via near-weekly phone calls or Facetime sessions during critical periods of project planning. Biweekly meetings of OVM staff, volunteers, and the DNP student consisted of updates, consultations, intervention planning, and group visits to clients and other visits to homeless service sites. The DNP student and another USF student and OVM volunteer also coordinated via email and phone to visit clients together. The DNP student met or corresponded with her advisor periodically to consult about key aspects of the project. See Appendix K for responsibility/communication table.

### **Study of the Intervention**

#### **Measures**

Successful completion of the project for the purpose of the Doctor of Nursing Practice degree required implementation of the educational intervention in at least two settings. In addition to this threshold of success, an evaluation strategy using the Institute for Healthcare Improvement ([IHI], 2015) Model for Improvement was developed to determine the effectiveness of the intervention and potential for impact on patient care (see Appendix L).

In keeping with the IHI model, three types of measures were included: outcome, process, and balancing measures. The outcome measures align with the intervention aims of increasing clinician ACP knowledge, confidence in ability to conduct ACP conversations, and intention to change practice regarding ACP. In order for clinicians to change their practice and implement ACP effectively with vulnerable clients, they must have both sufficient knowledge and sufficient confidence in their ability to conduct the ACP conversations. Also, teaching and evaluating learners along more than one domain, in this case *cognitive* and *affective*, is preferred to using a single domain (Bastable, 2014). See Appendix M tables M1 and M2 for measure detail.

Process measures are used to determine intermediate progress toward achieving the outcome measures. For this project, process measures demonstrate implementation of the seminars and collection of pre-test and post-test data. The balancing measure assesses barriers to changing practice.

The DNP student created pre- and post-intervention tests to collect data for the measures described (see appendix N). These assessment instruments contained two content questions to measure knowledge and one question to measure confidence. The post-intervention test contained an item measuring intention to change practice. Open response items included an item asking for description of specific intended changes to practice and an item to assess barriers to changing practice. Items 4-8 on the post-test were modeled after items used commonly in evaluation of continuing medical education programs, such as those used by Pri-Med (Pri-Med LLC, 2017). The pre- and post-test questions were reviewed and approved by the DNP student's advisor.

### **Analysis**

The primary method of data analysis for this project was comparison of means. Mean scores on the knowledge items and confidence items from the pre-test and post-test were calculated. OVM scores and CANP scores were calculated separately. The goal for the knowledge and confidence measures was for the post-test mean score for each group to exceed the pre-test mean score for each group. For this project, a trend of increased knowledge and confidence was considered to indicate intervention success. Analysis for the intent to change practice consisted of calculating the mean score for each group and determining whether the mean exceeded the goal. The goal for this measure was a score greater than 3, where 3 equaled "neutral" on the Likert-type scale and higher scores indicated greater agreement with the

statement “I plan to change my practice based on what I learned in this activity.” Thus, a score greater than 3 indicated average positive intention to change.

### **Ethical Considerations**

This project promotes the implementation of ACP by public health nurses, NPs, and other clinicians for a vulnerable population in order to preserve self-determination at EOL and minimize the provision of burdensome and unwanted health care interventions. The nature of this project was highly congruent with many of the provisions of the American Nurses Association (ANA, 2015) *Code of Ethics for Nurses with Interpretive Statements*. The *Code* specifically states that nurses “should promote advance care planning conversations and must be knowledgeable about the benefits and limitations of various advance directive documents” (ANA, 2015, p. 3). The *Code* also stipulates that applying research to practice is an important aspect of the nurse role (ANA, 2015). The DNP student integrated evidence regarding EOL concerns common to people who are homeless into recommendations for effective ACP conversations.

The USF DNP department determined that this project met the guidelines for an evidence-based change in practice project as outlined in the DNP project checklist and was approved as non-research (see appendix B). There were no identifiable concerns or conflicts of interest noted for this project.

### **Results**

All outcome measure goals were achieved. See Appendix O for table of results and Appendix P tables P1-P4 for individual-level data. The knowledge outcome measure required an increase in the average score for items 1 and 2 on the post-test compared to the pre-test. Each item was worth 2 points, for a total of 4 possible points. In the OVM group, the average pre-test

score was 3 and the average post-test score was 3.67. In the CANP group, the average pre-test score was 3.18 and the average post-test score was 3.65. Item 2, which was most frequently missed, required the identification of the POLST form as the most appropriate AD for a seriously ill individual who did not wish to have cardiopulmonary resuscitation under any circumstances and wished to avoid hospital admission.

Goal attainment for the confidence outcome measure required an increase in the average group score on item 3 on the post-test in comparison to the average group score on the pre-test. This item measured participants' level of agreement with the statement "I feel confident in my ability to discuss end-of-life preferences and plans with patients/clients." The term *patients* was used with the CANP group whereas *clients* was used with the OVM group to reflect common preferences of NPs vs. public health practitioners. In the OVM group, the pre-test average score was 2.33 and the post-test average score was 3.67. Based on the Likert-type scale values used, the pre-test score of 2.33 falls between "disagree" and "neutral," whereas the post-test average score of 3.67 falls between "neutral" and "agree." The CANP group displayed higher overall levels of confidence. The average pre-test score of 3.59 falls between "neutral" and "agree." The post-test score of 4.29 falls between "agree" and "strongly agree." Both groups indicated increased confidence following the interventions. Nineteen out of the 20 total participants selected "agree" or "strongly agree" in response to the confidence item. The remaining participant selected the "neutral" response, which for her was an increase in confidence from "strongly disagree" on the pre-test.

For the intention to change measure, goal attainment required an average group score of greater than 3 on the post-test, indicating a level of agreement falling above absolute neutral. Both groups exceeded the goal with average scores falling between the "agree" (4) and "strongly

agree” (5) levels. The OVM group’s average score was 4.67 and the CANP group’s average score was 4.29. Only two individual participants in the CANP group rated their intention to change as “neutral” or lower and these individuals both rated their confidence at the highest level. Lack of intention to change for these participants likely indicated that these participants considered themselves already highly skilled and consistent providers of ACPs prior to the intervention.

Item 7 requested that participants indicate specific intended changes to practice. Most respondents to this item in the CANP group described intention to initiate ACP conversations more frequently or with a broader range of patients. OVM respondents reported planning to implement specific recommended communication techniques. All 3 OVM participants responded to item 7, but only 8 out of the 17 CANP post-tests contained answers to this item.

Process measure goals were also met. Two seminars were implemented, equal to the seminar implementation goal. The measure of tests returned was successful with the number of tests collected at OVM equaling the goal of 3 pre-tests and 3 post-tests and the number of tests collected at CANP, 17 pre-tests and 17 post-tests, exceeding the goal of 12 tests of each type.

The goal of the balancing measure was to identify two barriers to changing practice related to ACP. The two most commonly reported barriers gleaned from item 8, an open response item, were lack of time and patient discomfort with discussing EOL issues. Lack of time was reported by 5 out of 8 CANP respondents and 2 out of 3 OVM respondents. Patient discomfort was reported by two CANP respondents. See Appendix Q for full transcripts of comments on open response items 7 and 8.

Three items on the post-test were not included in the formal measures, but aid in the evaluation of the intervention. These items were modeled on questions commonly used in

continuing education modules to evaluate intervention quality and relevance to practice. Item 4 asked participants to rate their level of agreement using the Likert-type scale with the statement “Education content is relevant to my current practice.” Sixteen out of the 20 participants selected “strongly agree,” with the remaining four selecting “agree.” Item 5 asked for Likert-type scale agreement rating with “Education content achieved the learning objectives.” Eighteen out of the 20 total participants selected “strongly agree” for item 5. The remaining two participants selected “agree.” Based on these results, the intervention was perceived as both relevant to practice and successful in meeting learning objectives. Learning objectives are included in Appendix N with other intervention materials.

All OVM pre- and post-tests were complete with responses to every item from all participants. In the CANP cohort, pre-tests were complete, but some post-tests contained unanswered items. Data were missing from item 6 on 4 post-tests, item 7 on 9 post-tests, and item 8 on 9 post-tests.

## **Discussion**

### **Summary**

Goals for all measures were successfully achieved. The intervention was implemented in two settings and data were collected from 20 pre-tests and 20 post-tests. The educational intervention described in this paper was successful in leading to gains in ACP-related knowledge and confidence. Overall, participants in the intervention expressed positive intention to change practice based on learnings. Participants also expressed high levels of agreement with statements assessing the intervention’s relevance to their clinical practice and success in meeting learning objectives.

OVM and CANP were both valuable sites for implementation. OVM allowed the DNP student to engage homeless clients in individual ACP sessions, which was tremendously helpful for shaping the project. Following the success of the intervention at OVM, Widergren expressed her commitment to establish ACP as a standard part of OVM's client services. The CANP session was valuable for its broad reach to NPs, the originally intended target group from different organizations and regions statewide.

The intervention was well-received by both audiences. The combination of lecture, discussion, role play, and supplemental materials was effective. Many participants commented to the DNP student specifically about the value of the role-play component. Based on these comments, practicing ACP conversations was not always a comfortable experience for participants, but many viewed it as helpful to developing confidence and skill. The success of this project suggests that NPs and other health care personnel may welcome opportunities to learn about ACP and practice ACP conversational skills. In the DNP student's experience, clinicians are often aware of the importance of ACP, but only rarely have they had opportunities to develop skill in conducting these challenging conversations in a training environment. Based on encounters with the participants in these interventions, specialized knowledge regarding ACP with vulnerable populations is also lacking. Disseminating learnings related to this project may help to close this knowledge gap. The upcoming publication of the DNP student's literature review on ACP and homelessness with practice recommendations in the journal *Public Health Nursing* may increase awareness on this topic.

**Interpretation**

This intervention resulted in increases in ACP-related knowledge and confidence. A recent systematic review of educational interventions for health care providers reported similar, but statistically significant results and similar challenges to this DNP project intervention (Chung et al., 2016). Four interventions demonstrated significant increases in knowledge, eight interventions demonstrated significant increases in self-efficacy, and eight interventions demonstrated significant increases in communication skill (Chung et al., 2016). The evidence however, was of low quality, in part due to lack of validity of the measures. Similar to the DNP project, impact of the interventions on actual patient care was unknown (Chung et al., 2016). Nearly all of the studies reviewed were conducted with physicians or medical students in inpatient settings. None focused on vulnerable populations. The ACP educational intervention implemented in this DNP project, with its focus on NPs, public health nurses, and homeless clients is, to the DNP's student's knowledge, a unique contribution to evidence-based practice.

A study of NP practice of ACP assessed barriers and facilitators to practice. Time was the most commonly reported barrier to changing practice regarding ACP by participants in this intervention. A survey of NPs by Dube et al. (2015) also reported time to be an important barrier to ACP. Specific time-related barriers to ACP included length of appointment and lack of staffing. Other barriers reported were lack of training, lack of leadership support, and lack of forms. Patient discomfort with EOL topics, the second most commonly reported barrier by participants in the current project, was not identified as a barrier by Dube et al. (2015). Facilitators to ACP included availability of AD forms, full staffing, longer appointment length, leadership support, training in EOL/ACP, and EMR (Dube et al., 2015). One participant in this project reported EMR as a barrier, not a facilitator to ACP.



**Limitations**

Evaluation of the effectiveness of the intervention was limited by inability to track actual implementation of ACP before and after the intervention. The pre-intervention state for OVM was known to include no instances of ACP. Lack of time to measure performance of ACP by OVM personnel post-intervention is a weakness of the project. Neither the pre- nor post-intervention state of ACP implementation for CANP intervention participants was assessed. It would have been possible to include a self-report item on the pre-test to measure previous individual ACP engagement, but obtaining post-intervention data would not have been practical.

The DNP student was not able to implement the project in a clinic setting serving a homeless population. In a clinic setting, it might have been feasible to measure implementation of ACP post-intervention and to create system supports for integrating ACP into routine care.

The DNP student considered it important to distribute and collect the pre- and post-tests separately in order to increase the validity of the knowledge measure. Thus these were designed as two distinct documents. This method worked well with the small OVM group, but with the larger CANP group it seemed a poor use of time to distribute and collect paper at multiple points, so both were distributed at the beginning of the session. The result of this logistical change was that the value of the separate documents for validity concerns was lost. Also, because they were two separate documents it was not possible to pair pre-tests and post-tests by individual participant in the CANP group. The DNP student was not able to determine individual changes in knowledge or confidence, for example.

On CANP post-tests, items 6-8 were often incomplete. There are a number of possible explanations for this. Items 6-8 were located on the second side of the post-test. The DNP student anticipated that participants might not see the second side and placed a large arrow and

written instruction to continue to side 2 on the bottom right edge of side 1. At the end of the CANP session, the DNP student also gave a verbal reminder to please complete both sides of the form. Some participants still may have inadvertently left it blank. Alternatively, perhaps the number or nature of questions on the post-test were too burdensome to complete. Another possibility is that the DNP student may not have allowed sufficient time for participants to complete the post-test. Item 6 data were used for the intention to change outcome measure. Four responses, comprising nearly 25% of the group, were missing for this item. Items 7 and 8 were left blank for 8 out of 17 post-tests. The DNP student did expect lower response rates for the open response items, which require more effort to complete, but this may have affected results. An alternative approach would have been to provide multiple choice response options for these items and to offer room for optional comment.

## **Conclusions**

Improving care at EOL has been identified as an important priority for health care, with widespread implementation of ACP as a necessary antecedent (IOM, 2014). For individuals experiencing homelessness, few opportunities exist for learning about EOL options, discussing values and preferences, and pursuing ACP (Leung et al., 2015). Increased morbidity and mortality, low social support, and mistrust of healthcare providers contribute to the urgency of need for ACP opportunities for homeless individuals.

Educating individuals who are homeless about different types of EOL care is extremely important, but health professionals should use caution not to impose their own perceptions of appropriate EOL care or opinions regarding a “good” death (Russell, 2014). Traumatic life experiences on the street and in health care systems may shape EOL care preferences for people who are homeless in ways health professionals may not expect or readily understand. Clinicians

should be mindful of supporting client autonomy throughout the process of informed decision-making that comprises ACP. Also, though completing ADs is important, individual treatment goals and care preferences are likely to change over time. ACP is best understood as an ongoing, dynamic process that occurs over a series of conversations throughout the lifespan of the client (Lum et al., 2015). Beyond their value for AD completion, ACP conversations may offer therapeutic benefits (Bartels et al., 2008) and may help prepare clients to make improved future health care decisions (Sudore & Fried, 2010). The project described in this paper involved an intervention to educate current and future health care personnel, including NPs, about EOL concerns of homeless individuals and ACP methods. The purpose of this intervention was to promote initiation of ACP discussions with this vulnerable population and enable preservation of autonomy and patient-centered care at the EOL. The intervention was associated with positive gains in knowledge and confidence as measured by the assessment tools and participants expressed positive intention to change their practice based on what they learned during the intervention.

More research on ACP is needed. Potential topics include investigations into effectiveness of group vs. individual ACP interventions with people who are homeless and effectiveness of ADs in shaping the planning and provision of EOL care. Innovations enabling accessible storage of completed ADs would also be helpful to increasing the application of ADs to clinical decision-making.

ACP should be recognized as a basic component of health care for all adults. Health care delivery organizations should support individual health care providers to implement ACP by enacting policies and standards to establish ACP provision as an expected practice. Continuing

education programs for clinicians, such as the educational intervention described in this paper, are needed to build knowledge and skill in conducting effective ACP conversations.

Inequities in access to quality care including ACP, and societal burdens of high health care costs necessitate policy support for public health involvement in EOL care planning and management. State public health departments should allocate funds for campaigns to educate the public about palliative care and ACP. Public funding for education and training on EOL topics for health professionals may also help to increase access to ACP and palliative care options for vulnerable populations.

### **Other Information**

#### **Funding**

The DNP student has no external funding sources to report. All out-of-pocket costs were paid by the student.

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## Appendix A

### Definitions

**Advance care planning:** The process of making decisions about care one would want to receive in the future, if unable to make one's own decisions at that time. Advance care planning includes gaining information about types of available treatment, making decisions about preferred types of treatment in the case of life-limiting illness, communicating personal values and preferences with loved ones, and completing written documents clarifying treatment preferences (National Hospice and Palliative Care Organization, 2016).

**Advance directives:** Broad category of documents that describe preferred or excluded medical treatments or designate proxy decision-makers (IOM, 2014).

**End-of-life care:** A “range of medical and social services, including disease specific interventions as well as palliative and hospice care for those with advanced serious conditions who are near the end of life” (IOM, 2014, p. 386).

**Homeless:** Lacking stable housing, including those sleeping in locations not intended for human habitation, temporary lodging in shelters or transitional settings, lacking lease or home ownership within past 60 days, having moved two or more times within the preceding 60 days, or fleeing or attempting to flee domestic violence and lacking alternative housing (National Alliance to End Homelessness, 2016).

## Appendix B

## DNP Project Approval Form: Statement of Determination

**Student Name:** Sarah Hubbell **Chair:** Dr. Loomis**Title of Project:** Implementation of an Educational Intervention and Toolkit to Promote End-of-Life Discussions with Homeless Individuals**Brief Description of Project:****Background**

In the 2014 report, *Dying in America*, the Institute of Medicine (IOM) identified an urgent need for improvement in health care at the end of life. According to the report, end-of-life care should be patient-centered, thereby honoring individual preferences, and should promote quality of life (IOM, 2014). The IOM (2014) recommended societal-, community-, and individual-level interventions to disseminate information regarding end-of-life options and palliative care, to encourage conversations about individual values and preferences, and to provide opportunities for completion of advance directives to facilitate improved end-of-life care.

Homeless individuals, despite increased mortality, are rarely offered opportunities to discuss end-of-life options (Leung, Nayyar, Sachdeva, Song, & Hwang, 2015). Also, homeless persons may be less likely to have family members or other surrogate decision-makers present at the end of life (Song et al., 2007). Advance directives may, for homeless individuals lacking social support, be the only means of communicating treatment preferences should they become incapacitated (Song et al., 2010). Health care providers may assume homeless persons to be uninterested in advance care planning, given their immediate concerns of daily living. However, in multiple studies, homeless research participants have welcomed opportunities to engage in discussions of end-of-life concerns and, in some cases, to formulate advance directives (Tarzian, Neal, & O'Neil, 2005; Song et al., 2007; Song et al., 2008; Song et al., 2010). For example, in one cohort study of 205 homeless shelter resident participants, more than half opted to complete an advance directive after a single counseling intervention (Leung et al., 2015).

**A) Aim Statement:**

The aim of this project is to promote health care provider initiation of end-of-life discussions and advance care planning with homeless individuals by implementing and evaluating an educational intervention and toolkit in one or more health care organizations serving homeless individuals in Marin County, California.

**B) Description of Intervention:**

Audience: Nurse practitioners (NPs), physicians (perhaps also nurses and social workers if appropriate to the setting)

Intervention elements:

A. Interactive educational seminar

1. Discuss research findings regarding end-of-life concerns among homeless persons
2. Provide information regarding end-of-life options and key documents
  - a. California Advance Health Care Directive
  - b. Physician Orders for Life Sustaining Treatment (and nurse practitioner role)
  - c. Hospice
  - d. Palliative Care
  - e. California aid-in-dying law
3. Discuss reimbursement for advance care planning
4. Share strategies and resources for engaging in productive discussions about values and goals of care
5. Provide opportunity for role-play or simulation
6. Evaluate learning outcomes (Pre- and post- test)

B. Toolkit/Educational module (paper and pdf)

1. Brief literature review on end-of-life concerns and planning in homeless populations
2. Information on end-of-life options and key documents
  - a. California Advance Health Care Directive
  - b. Physician Orders for Life Sustaining Treatment (and nurse practitioner role)
  - c. Hospice
  - d. Palliative Care
  - e. California aid-in-dying law
3. Information on reimbursement for advance care planning
4. Resources for engaging in end-of-life discussions from Coalition for Compassionate Care of California
5. Case study
6. Evaluation of learning outcomes

Note: Intervention content may be tailored to meet identified local needs at one or more agencies serving homeless populations in Marin County (Opportunity Village, Ritter Center, Marin Community Clinic) and perhaps also to meet the needs of NP students for implementation in an educational setting.

**C) How will this intervention change practice?**

It is common for homeless individuals to mistrust health care providers, often

based on previous experiences in which they felt disrespected or mistreated in health care systems (Song et al., 2008). In qualitative research, homeless participants have reported perceptions of health care providers as paternalistic or controlling, particularly regarding care at the end of life (Song et al., 2008). Common concerns among homeless focus group participants included being sustained too long on life support and being denied sufficient care if they had a good chance of recovery (Tarzian et al., 2005). Discussing end-of-life preferences and completing advance directives are important ways for homeless individuals to advocate for themselves and preserve autonomy within healthcare systems.

Despite increased mortality rates for homeless people, estimated between 1.6 and 10 times greater than the general population, homeless individuals are unlikely to be offered opportunities for advance care planning (Leung et al., 2015). This intervention is intended to increase health provider knowledge, skill, confidence, and willingness to initiate end-of-life discussions with homeless patients. The intervention may also be implemented more widely to NP students and practicing NPs to facilitate the development of end-of-life discussion and advance care planning competencies in those groups. Ultimately, the goal of this project is to build competence and confidence in NPs and other providers in order to empower them to engage all patients, but particularly homeless individuals, in discussions about care at the end of life in order to promote autonomy and patient-centered care.

#### **D) Outcome measurements:**

Tests will be administered before and after the educational intervention. The tests will assess: 1. Knowledge of key concepts regarding end-of-life care and advance planning documents. 2. Confidence in ability to initiate and engage individuals in end-of-life discussions. An additional item on the pre-test will ask for an estimate of the number of patients in the prior 30 days the provider offered to discuss end-of-life or advance planning concerns. A follow-up survey after one and two months will also contain this item. Additional questions on the post-test will assess the quality and usefulness of the intervention. The follow-up survey will include questions about barriers to initiating and continuing end-of-life discussions.

Measure	Definition	Data Source	Goal
End-of-Life (EOL) Knowledge	Numerator: # of EOL content items correct Denominator: total # of EOL content items	EOL Pre-test, EOL Post-test	Post-test score > Pre-test score (individual and test cohort will be calculated)
EOL Confidence	Likert score (1-5) on Confidence item “How confident are you in your ability to conduct EOL	EOL Pre-test, EOL Post-test	Post-test score > Pre-test score (individual and test cohort will be calculated)

	discussions with homeless individuals?"		
Estimated # EOL Discussions in Past Month	Range estimate (0, 1-2, 3-5, 6-10, 11+) of EOL discussions with distinct patients in past 30 days	EOL Pre-test, One- and Two-month follow-up surveys	Estimated # at One-month follow-up > Estimated # on Pre-test

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To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:

(<http://answers.hhs.gov/ohrp/categories/1569>)

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

### EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST \*

**Instructions: Answer YES or NO to each of the following statements:**



Project Title:	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	X	
The specific aim is to improve performance on a specific service or program and <b>is a part of usual care</b> . ALL participants will receive standard of care.	X	
The project is <b>NOT</b> designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does <b>NOT</b> follow a protocol that overrides clinical decision-making.	X	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does <b>NOT</b> develop paradigms or untested methods or new untested standards.	X	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does <b>NOT</b> seek to test an intervention that is beyond current science and experience.	X	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	X	
The project has <b>NO</b> funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	X	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., <b>not</b> a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	X	
If there is an intent to, or possibility of publishing your work, you and supervising faculty and the agency oversight committee are comfortable with the following statement in your methods section: <i>"This project was undertaken as an Evidence-based change of practice project at X hospital or agency and as such was not formally supervised by the Institutional Review Board."</i>	X	

**ANSWER KEY:** If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to ANY of these questions is **NO**, you must submit for IRB approval.

\*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

**STUDENT NAME (Please print):**

\_\_\_\_\_Sarah Hubbell\_\_\_\_\_

**Signature of Student:** \_\_\_\_\_Sarah A. Hubbell\_\_\_\_\_

**DATE**\_\_4/21/16\_\_\_\_\_

**SUPERVISING FACULTY MEMBER (CHAIR) NAME (Please print):**

\_\_\_\_\_Jo Loomis\_\_\_\_\_

**Signature of Supervising Faculty Member (Chair):**

\_\_\_\_\_DATE\_\_\_\_\_

## Appendix C

## Gap Analysis

Desired State	Current State	Action Needed
Global/State level		
ACP is standard component of routine health care for all	Vulnerable populations such as people who are homeless have decreased access to ACP	Communicate need for ACP, particularly for vulnerable populations to healthcare providers
NPs and other health care providers have knowledge and skill necessary to conduct effective ACP conversations	NPs report need for education on EOL issues and ACP (Dube et al., 2015)	Develop and implement educational intervention to increase clinician knowledge and skill in conducting ACP conversations
Local level		
ACP is standard component of services provided by OVM	No ACP provided for OVM clients	Implement educational intervention for OVM staff
<i>Note:</i> ACP = advance care planning; NP = nurse practitioner; EOL = end of life; OVM = Opportunity Village Marin		

## Appendix D

## Study Characteristics and Findings

Authors, Year	Design, Level, Rating	Variables or Topics	Setting, Sample	Results	Limitations, Strengths	Conclusions
Song, Ratner, Wall, Bartels, Ulvestad, Petroskas . . . & Gelberg (2010)	RCT  Level I A	DV: ADC IV: Guided intervention or self-guided intervention	8 service sites, Minneapolis, MN N: 262 Male: 73.7% Black: 53.8% White: 31.7% Native American: 6.9%	Total ADC: 26.7% Guided ADC: 37.9% Self-guided ADC: 12.8% Surrogate designation: 87%	Strength: Sample similar to homeless in state of MN and U.S.  Limitation: No literacy assessment.	ACP interventions were effective. Guided intervention was associated with significantly higher levels of ADC than a self-guided intervention ( $p < 0.001$ ).
Song, Wall, Ratner, Bartels, Ulvestad, & Gelberg (2008)	RCT  Level I B	DV: ADC IV: Guided intervention or self-guided intervention	Drop-in center, St. Paul, MN N: 59 Male: 75% Black: 51% White: 34% Native American: 7%	Total ADC: 44% Guided ADC: 59% Self-guided ADC: 30%	Limitation: Small sample	ACP interventions were effective. Guided intervention was associated with significantly higher levels of ADC than a self-guided intervention ( $p = 0.02$ ).
Leung, Nayyar, Sachdeva, Song, & Hwang (2015)	Quasi-experiment  Level II B	DV: ADC IV: Guided intervention	Homeless shelter, Toronto, Canada N: 205 Male: 100% Black: 8.8% White: 70.2% Asian: 11.2%	Total ADC: 50.2% Surrogate designation: 61.2%	Limitations: Setting with universal health insurance may not be comparable to U.S.	Physician and student-guided interventions were effective in attaining ADC and surrogate designation.

Authors, Year	Design, Level, Rating	Variables or Topics	Setting, Sample	Results	Limitations, Strengths	Conclusions
Bartels, Ulvestad, Ratner, Wall, Uutala, & Song (2008)	Qualitative Level III B	Content analysis of completed homeless-tailored ADs	Drop-in shelter, St. Paul Minnesota N: 17 Male: 82.4% Black: 64.7% White: 23.5% Native American: 11.8%	EOL concerns: 1. Notifying family 2. Leaving family 3. Burden on family 4. Cost of burial 5. Dying alone	Limitations: Analysis only of guided intervention arm participants from Song et al., 2008	ADs have added value for homeless population in documenting post-death preferences. Psychological stresses exceeded physical concerns.
Ko, Kwak, & Nelson-Becker (2015)	Qualitative Level III B	Semi-structured interviews about characteristics of good and bad death	Transitional housing site, San Diego, CA N: 21 Age: 60+ Male: 85.7% Black: 23.8% White: 52.4% Latino: 14.3%	Themes identified with good death: 1. Peaceful death 2. Lack of suffering 3. Spiritual connection 4. Reconciling with loved ones  Themes identified with bad death: 1. Violent death 2. Prolonged life support 3. Becoming dependent 4. Dying alone	Limitations: Single site, small sample	Many characteristics of good and bad death identified by participants were similar to those expressed by other study populations. However, characteristics such as violent death, dying alone, and making amends with loved ones represent concerns particularly relevant to homeless persons.

Authors, Year	Design, Level, Rating	Variables or Topics	Setting, Sample	Results	Limitations, Strengths	Conclusions
Ko & Nelson-Becker (2014)	Qualitative Level III B	Semi-structured interviews about EOL concerns and preferences	Transitional housing site, West coast U.S. city N: 21 Age 60 + Male: 85.7% Black: 23.8% White: 52.4% Latino: 14.3%	Themes identified: 1. Discomfort with EOL topic 2. God controls EOL 3. Physicians trusted to make care decisions 4. ACP not a priority, but is important	Limitations: Single site, small sample	Though some felt ACP was not important, others believed their vulnerability increased their need for ACP.  Need for sensitivity in broaching topic.
Song, Bartels, Ratner, Alderton, Hudson, & Ahluwalia (2007)	Qualitative Level III B	Focus group interviews about EOL care concerns and preferences	6 social service agencies in Minneapolis and St. Paul, MN  N: 53 Male: 65% Black: 27% White: 22% Native American: 36%	Themes included: 1. Dying alone and unnoticed 2. Fate of body 3. Concerns associated with veteran status 4. Feelings about notifying family 5. Experiences of others' deaths	Strengths: In-depth interviews enabled detailed and nuanced discussion and findings  Multiple sites	Homeless participants had many experiences and feelings related to death and EOL care, some of which are different from other populations.

Authors, Year	Design, Level, Rating	Variables or Topics	Setting, Sample	Results	Limitations, Strengths	Conclusions
Song, Ratner, & Bartels (2005)	Qualitative Level III B	Focus group interviews about EOL experiences, concerns, and conceptions of good death	Shelter, Minneapolis, MN N:11 Male: 100%  Social workers (N: 9) from two homeless service organizations were also interviewed	Themes identified: 1. Death as sudden, certain, often violent 2. Fear of dying alone, violently, or in pain 3. Concerns about fate of body 4. Religious concerns 5. Barriers to health care, mistrust of providers 6. Lack of trusting relationships	Limitation: Small pilot study	Homeless participants had strong interest in discussing EOL topics, to the surprise of the researchers
Tarzian, Neal, & O'Neil, (2005)	Qualitative Level III B	Focus group interviews about EOL experiences, decision-making, and preferences	Urban U.S. clinic for individuals experiencing homelessness  N: 20 Male: 60% Black: 80%	Themes identified: 1. Valuing preferences 2. Intensity of emotions 3. Importance of religion	Limitation: Single site, small sample Strengths: Acknowledgement of socioeconomic and racial differences	Participants expressed same range of preferences for EOL care as larger population. Authors emphasized importance of self-awareness for clinicians.

Authors, Year	Design, Level, Rating	Variables or Topics	Setting, Sample	Results	Limitations, Strengths	Conclusions
Tarzian et al., (2005) cont'd			White: 20%	4. Compassionate care 5. Need for more ACP opportunities	between researchers and participants  Counseling offered after focus group.	

*Note:* RCT = randomized controlled trial; DV = dependent variable; IV = independent variable; ADC = advance directive completion; ACP = advance care planning; AD = advance directive; EOL = end of life. Evidence evaluated with Johns Hopkins Nursing Evidence Based Practice Research Appraisal Tool (Dearholt & Dang, 2012).



## Appendix E

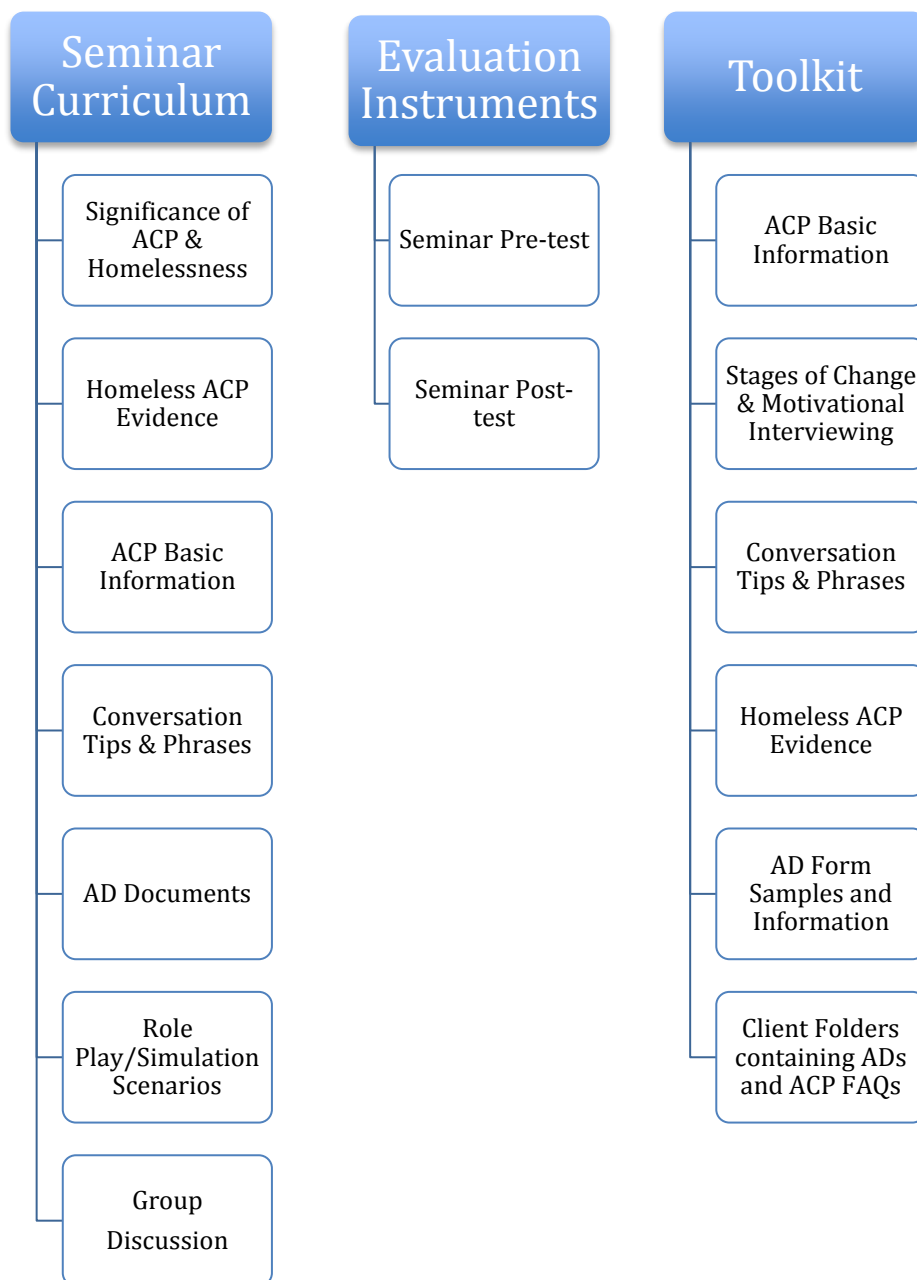
## Project Timeline

	2016						2017				
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Prospectus Approval											
ACP/ POLST Training											
Toolkit Development											
OVM Needs Assessment											
OVM planning meetings											
Pilot ACP OVM, Enterprise											
Seminar Development											
OVM Seminar Implementation									3/3		
CANP Seminar Implementation									3/18		
Data Analysis											
Write-up											
Final presentation											

*Note:* ACP= Advance care planning, POLST = Physician Orders for Life-Sustaining Treatment, OVM = Opportunity Village Marin, CANP = California Association for Nurse Practitioners

## Appendix F

## Work Breakdown Structure



## Appendix G

### Intervention Materials

#### Learning Objectives

1. Identify at least three commonly reported end-of-life concerns among homeless individuals
2. Identify at least two evidence-based rationales for offering advance care planning to homeless individuals
3. Identify advance directive forms appropriate to individual health status and literacy level
4. Demonstrate at least two recommended conversational techniques in a role-play scenario

## Advance Care Planning Toolkit

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University of San Francisco*

## **Advance Care Planning Toolkit**

### **Contents**

#### **Essentials**

Advance Care Planning Essentials

FAQs

Advance Care Planning Steps

Stages of Change and Advance Care Planning

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Effective Communication for Advance Care Planning

Nonverbal and Verbal Communication

Conversation Tips and Phrases

#### **Forms**

Facts and FAQs

California Advance Health Care Directive

Physician Orders for Life-Sustaining Treatment

#### **Homelessness**

Homelessness and Advance Care Planning

Key Research Findings on Homelessness

Recommendations for ACP with Individuals Experiencing Homelessness

#### **Resources**

## Advance Care Planning Essentials

### What is advance care planning?

- Advance care planning (ACP) is the process of “making decisions about the care you would want to receive if you are unable to speak for yourself” (NHPCO).
- ACP usually consists of a series of conversations over time involving patients, families, and care providers and may include the completion of advance directives.

### For whom is advance care planning appropriate?

- ACP is appropriate for all adults, not just those who are elderly or seriously ill.

### What are advance directives?

- Advance directives are legal documents that may:
  1. Designate someone (a “proxy”) to make medical decisions when a person is no longer able to make decisions for him- or herself. (This is also known as power of attorney for healthcare)
  2. Describe wanted and unwanted medical treatments. (This is also known as a living will).

### Why is advance care planning important?

- Advance care planning promotes patient-centered care at the end of life by allowing care plans to be informed and shaped by patient preferences.
- Advance care planning can provide peace of mind for patients and may reduce burdens and conflicts for loved ones.

## Advance Care Planning Steps

Advance care planning may be conceptualized as a number of steps, listed below (Lum, Sudore, & Bekelman, 2015). A single conversation may only address one or two of the steps, but initiating the process may help stimulate patients' interest and set the stage for future conversations. Engaging in multiple ACP conversations over time may help prepare patients and surrogates to make health care decisions at the time the need arises (Sudore & Fried, 2010). Even if ADs are not completed, clarification of values and identification of treatment goals are valuable outcomes. Individuals should be encouraged to communicate their preferences, values, and goals to loved ones as well as health care providers in order to improve the likelihood that their wishes will be honored. Similarly, completed ADs should be copied and shared.

1. Assess readiness
2. Identify decision maker
3. Explore values/Goals of care
4. Document preferences
5. Apply preferences to care plans

## Stages of Change & Advance Care Planning

Advance care planning can also be understood as a health behavior. Using the transtheoretical stages of change model can be useful to understanding individual readiness and willingness to engage in advance care planning (Fried, Bullock, Iannone, & O'Leary, 2009). Clinicians should not expect clients to complete advance directive documents after a single conversation, but rather, should plan to undertake a number of conversations over time as clients move through the stages of change. Even after documents have been completed, however, the process continues. Changes in health status, values, and goals of care over time necessitate ongoing revision of advance directives.

Stage	Individual characteristics/actions
Precontemplation	No awareness of or interest in ACP
Contemplation	Increased perception of relevance of ACP, considers ACP
Preparation	Begins values clarification, plans to discuss ACP
Action	Engages in ACP conversations, completes advance directives
Maintenance	Reconsiders choices and values, revises advance directives

Motivational interviewing, described by Rollnick, Miller, and Butler (2008), is a method of communication often used with the transtheoretical model to promote behavioral change. Motivational interviewing consists of eliciting and amplifying individuals' own reasons for changing a behavior. The clinician provides reflective responses that serve to highlight ambivalence and reveal conflicts between patients' stated goals or values and the effects of current behaviors. Rather than telling patients why they



should change or adopt behaviors, clinicians guide patients to identify their own motivations for change. For example, the clinician might begin by inquiring briefly about the individual's reasons for not participating in ACP. Next, the clinician would inquire about reasons he or she might participate in the future. Motivational interviewing consists of a collection of conversational techniques, but simply asking individuals to identify potential benefits of participating in advance care planning may be helpful. Those who are already familiar with motivational interviewing may certainly apply additional aspects to advance care planning conversations as well.

## Effective Communication for Advance Care Planning

### Nonverbal Communication

1. Sit down

*Sitting conveys full attention, feels less rushed and more satisfying to client/patient.*

2. Eye contact

*Maintain comfortable eye contact. Do not look at screens or papers while client/patient is speaking.*

3. Maintain open posture

*Avoid crossing arms and legs. Rest hands with palms facing up.*

4. Lean in

*Leaning forward conveys interest in the conversation, whereas leaning backward conveys boredom or lack of engagement.*

5. Comforting touch ok

*Lightly touch arm or leg at appropriate moments. Don't ignore outbursts of emotion.*



### Verbal Communication

1. Avoid medical jargon
2. Speak slowly

*Demonstrate respect for gravity of the topic.*

3. Pause frequently

*Allow time for thoughtful responses. Count to 4.*

4. Ask for clarification when needed

*“Can you tell me what \_\_\_\_ means to you?”*

5. Paraphrase to be sure you understand correctly

*“What I hear you saying is . . .”*

6. Screen for additional concerns before moving on to another topic

*“Is there something else you’d like to add or ask?”*

(Wasylynuk & Davison, 2016)

## Conversation Tips and Phrases

1. Normalize the discussion:

*“Part of my job is to talk to my patients/clients about the end of life.”*

*“This is something I talk about with everyone.”*

2. Ask permission/Assess readiness:

*“Have you ever thought about what might happen if you got so sick that you couldn’t make decisions anymore?”*

*“Would it be ok if we talked about that today?”*

3. Discuss decision-making proxy before treatment preferences:

*“Is there someone you trust to make decisions about your health care for you if you were too sick to decide for yourself?”*

*“What would you want that person to know?”*

4. Relate to their health problem/situation

*“Many people with (your condition) think about the possibility of dying and have questions or worries about this. What concerns do you have?”*

5. Ask about past experiences

*“Have you had experience making medical decisions for anyone during a serious illness? How was that for you?”*

6. For most patients, discuss goals of care and any unacceptable states of being rather than specific interventions:

*“What makes life worth living?”*

*“Some people say they want to live as long as possible, even if they are uncomfortable or are unable to eat or communicate. Others would not want to be in those situations. How is it for you?”*

(Lum et al., 2015)

## Advance Directives: Facts About Forms

The main functions of advance directives are to:

1. Appoint one or more surrogate decision-makers
2. Indicate treatment preferences.

Completion of any section of advance directives is always voluntary. Individuals may opt to complete only the decision-maker (or “medical power of attorney”) section, only the treatment options (or “living will”) section, or both. Many different advance directive forms are legal and available. One highly recommended form developed by health literacy experts is available as a free download from [www.iha4health.org/our-services/advance-directive/](http://www.iha4health.org/our-services/advance-directive/), and is displayed later in this section. Another popular option is the Five Wishes form, available from [www.agingwithdignity.org](http://www.agingwithdignity.org) for a fee. This form includes detailed comfort-focused options that other forms lack. It is most suitable for those with higher literacy levels who are interested in shaping their end-of-life care.

### Key points:

- California law requires that advance directive forms be signed by 2 witnesses *or* be notarized.
- Health care providers may *not* serve as witnesses for patients under their care.
- Copies of completed advance directives are as valid as originals.

## POLST – Physician Orders for Life-Sustaining Treatment

### What is POLST?

- POLST is used to direct care across multiple settings for people with serious, life-limiting illness.
- POLST forms are intended to move with the individual to ensure that care preferences are honored no matter where the person receives care.
- POLST does not replace an advance directive. Patients with POLST should also have an advance directive.

### Who signs POLST?

- A health care provider (physician, nurse practitioner, or physician assistant) must sign this form, though preliminary discussions may be facilitated by social workers, case managers, or others involved in the patient's care.
- Nurse practitioners and physician assistants should only sign the newer version of the form that includes their titles.

### How sick should a person be before having a POLST?

- Health care providers should consider completing POLST if the person's death within one year would not be surprising.
- POLST directs care for a person's current condition, not for an unforeseen future illness.

### Where can I find a POLST form?

- POLST forms may be downloaded for printing from [www.capolst.org](http://www.capolst.org) or ordered on thick pink paper through a link on [www.capolst.org](http://www.capolst.org).
- POLST forms need not be pink, though use of thick pink paper was intended to enable easy location of the POLST form once completed.

### Can I make a copy of the form in case the original gets lost?

- Yes, copies of completed POLST forms are as valid as originals.

### My client wants to allow CPR, but doesn't want to be intubated. Is that ok?

- No. Selecting "Attempt Resuscitation/CPR" in section A requires selection of "Full Treatment" in section B. Opting for CPR necessitates following advanced cardiac life support (ACLS) algorithms (protocols), which include advanced airways, medications, and IV fluids.

In this situation, the client may wish to select "Trial Period of Full treatment" to avoid prolonged mechanical ventilation.



## Homelessness and Advance Care Planning

People who are homeless experience greater rates of illness and comorbidities than people with stable housing (Brown, Kiely, Bharel, & Mitchell, 2012). Even independent of other risk factors, homelessness increases risk of death (Morrison, 2009). Life expectancy among people who are homeless is estimated to be 12 years shorter than life expectancy of people who are not homeless.

Advance care planning is recognized as a standard component of primary care for adults of all ages (IOM, 2014; AAFP, 2013). People who are homeless are less likely to have access to regular primary care and are seldom offered opportunities for advance care planning (Leung, Nayyar, Sachdeva, Song, & Hwang, 2015). Integrating advance care planning into the care of people who are homeless is important to promote patient-centered care and self-determination for this vulnerable population. Many people who are homeless have experienced discrimination or have felt mistreated in health care systems. Advance care planning enables self-advocacy for individuals who are homeless even when they are no longer able to speak for themselves (Song et al., 2007).

Researchers have investigated end-of-life concerns and fears among people who are homeless. Some of these concerns, such as dying in pain, are similar to those of general populations. Others however, are particular to homeless populations, such as concerns about one's death going unnoticed, or one's body not being correctly identified (see next section for additional findings). Eliciting individuals' concerns and fears about death may help care providers and client advocates to better meet the advance care planning needs of homeless individuals.

Researchers have also studied effectiveness of advance care planning interventions with homeless populations. Overall, the interventions were effective, with about half of participants successfully completing an advance directive document in a single session. Two studies found that participants were more likely to complete an advance directive if a counselor or clinician guided the process than if they were given a written guide for assistance. Most participants were able to identify a suitable surrogate decision-maker. Researchers also found that religious beliefs and traumatic experiences were often significant in shaping end-of-life preferences of homeless individuals. Opportunities for advance care planning should be offered to people experiencing homelessness.

## **Key Research Findings on Homelessness and Advance Care Planning**

### **End-of-Life Concerns Reported by Individuals Experiencing Homelessness**

- Fear of dying alone or unnoticed
- Fear of dying violently or painfully
- Uncertainty regarding identification or disposition of one's body
- Concern about receiving inadequate healthcare because of homeless status
- Concern that preferences will not be honored

(Ko, Kwak, & Nelson-Becker, 2015; Tarzian, Neal, & O'Neil, 2005; Song et al., 2008)

### **Advance Care Planning Interventions with Homeless Populations**

- Participants were more likely to complete advance directives with assistance

(Song et al., 2008; Song et al., 2010)

- Most participants were able to identify a surrogate decision maker

(Song et al., 2010; Leung et al., 2015)

## Recommendations for ACP with Individuals Experiencing Homelessness

1. Approach ACP with sensitivity: Ask permission to discuss death

*Death is a difficult topic to discuss, particularly for those who have witnessed violent, painful, or otherwise “bad” deaths, as is common among people who are homeless*

2. View ACP as a process: Expect to engage in multiple conversations over time

*Perception of the need for ACP, values clarification, and formulation of care preferences occur over time, particularly for those who have not previously considered or discussed these topics.*

3. Acknowledge significance of lived/witnessed trauma in shaping end-of-life attitudes

*Traumatic experiences are common among homeless individuals*

4. Respect potential importance of religion/spirituality in end-of-life discussions

*Health care providers may underestimate role of religion/spirituality*

5. Avoid imposing one’s own care preferences or beliefs about good vs. bad death

*Care preferences vary widely in homeless and non-homeless populations. However, those with poor access to care may fear inadequate care more than prolonged aggressive care.*

6. Document identifying scars, tattoos, other distinctive physical characteristics

*Physical features may assist with identification of an unresponsive or deceased individual. Belongings such as I.D. cards may be lost or stolen.*

7. Pursue available options for storing and sharing completed forms (copies to hospitals, electronic database, etc.)

*Keeping paper documents dry and intact is difficult for people who lack housing.*

## Resources

### Institute for Healthcare Advancement

[www.iha4health.org/our-services/advance-directive/](http://www.iha4health.org/our-services/advance-directive/)

Free downloadable California Advance Health Care Directive suitable for low-literacy levels.

### Coalition for Compassionate Care of California

[www.coalitionccc.org](http://www.coalitionccc.org)

Detailed information on advance care planning for health care professionals and the public. Educational handouts available for purchase.

### Aging with Dignity

[www.agingwithdignity.org](http://www.agingwithdignity.org)

Five Wishes forms and educational materials for purchase. Suitable for patients with high literacy levels who are interested in specifying care measures, including comfort options at the end of life.

### California POLST

[www.capolst.org](http://www.capolst.org)

Information about POLST. Downloadable forms available in a variety of languages.

### National Hospice and Palliative Care Organization

[www.nhpco.org](http://www.nhpco.org)

Information about hospice and palliative care for health care professionals and the public.

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## Client Handout

### What is advance care planning?

- Advance care planning means making decisions about the kinds of care you would want if you could not speak for yourself.

What is most important to you in life?      What are your hopes for the future?

What do you know about your health?      What worries do you have about getting sick or about dying? Thinking and talking about all of these things can help create a plan that is right for you.

### Why is advance care planning important?

- Advance care planning helps health care providers and loved ones know your wishes so that if you become very sick or are dying, they can give you the type of care you would want.
- Letting others know what is important to you may help you feel more at peace.
- Advance care planning can also reduce stress and conflicts among your family or friends when you are ill or dying.

### What are advance directives?

Advance directives are legal documents that allow you to:

- Choose someone to make medical decisions for you in case you become too sick to make your own decisions.
- Say what medical treatments you do or do not want.

The California Advance Health Care Directive included in this folder can help you think about what is important to you. Share your thoughts with your nurse, doctor, or social worker, and complete the form when you feel ready.

### Advance Care Planning Patient Scenarios

**Mimi**

Age 68

Recently discharged from the hospital after admission for community-acquired pneumonia.  
30 pack-year smoking history

Mimi lost her home after her husband died 2 years ago. She has been living in her car.  
Has one daughter in another state, but they do not speak.

Decision-maker: She does not want her daughter to make decisions about her care.  
She thinks maybe her former neighbor, Susan, could be a decision-maker for her, but she hasn't talked to her in a few months.

Health concern: "I have lots of trouble with my breathing. I worry that one day I just won't be able to breathe – It's a horrible feeling not being able to catch your breath"

Past experience: Husband's death was long and slow. He was on a ventilator. This experience was difficult for Mimi because she didn't know if he would have wanted to live that way.

Mimi is hoping for a painless, peaceful death.

**Jim**

Age 55

History of chronic heavy alcohol use, now drinks occasionally

Homeless for 5 years, now in transitional housing

Divorced

Has two sons, knows their contact information, and thinks they could make decisions for him if needed, though he isn't sure they would be willing

Health concern: "I know my liver is ruined. That's my own fault and there's really nothing anyone can do about it."

Religion is important: "God is in control, really. I am just trying to do the best I can and make peace with God."

Felt disrespected in the ER in the past. Doesn't like hospitals for this reason.

Jim becomes uncomfortable at some point during the discussion and changes the subject.

**Karen**

Age 40

Recently diagnosed with stage IV ovarian cancer.

Karen rented a house with her sister Beth until 1 year ago, when the rent went up significantly and her sister's debts became unmanageable. They were evicted and are currently in transitional housing together, after spending nearly one year in shelters.

Decision-maker: Karen's sister Beth would be a good surrogate decision-maker. Beth should know that Karen doesn't want to have a lot of pain. Karen trusts Beth not to "give up on her" too soon.

Health concern: managing her cancer pain

Fears: She witnessed many acts of violence in the neighborhood surrounding the shelter and is afraid of a violent, painful death.

For Karen, the hospital is a place where she feels relatively safe.

She would not mind dying in the hospital.

Karen is hoping for a miracle to cure her cancer, but she knows this is unlikely.

Karen is interested in learning more about advance directives/ POLST forms and may express care preferences if asked (probably preferring a trial period of full treatment). She doesn't want Beth to have to worry about making the right choices.

## Suggested Phrases for Advance Care Planning Conversations

Getting started (normalize, assess readiness)

*"Part of my job is to talk to my patients about the end of life."*

*"This is something I talk about with everyone."*

*"Have you ever thought about what might happen if you got so sick that you couldn't make decisions anymore?"*

*"Would it be ok if we talked about that today?"*

Discussing decision-making proxy:

*"Is there someone you trust to make decisions about your health care for you if you were too sick to decide for yourself?"*

*"What would you want that person to know?"*

Discussing values, concerns: (relate to current situation, past experiences)

*"Many people with (your condition) think about the possibility of dying and have questions or worries about this. What concerns do you have?"*

*"Have you had experience making medical decisions for anyone during a serious illness? How was that for you?"*

Discussing goals of care/unacceptable states:

*"What makes life worth living?"*

*"Some people say they want to live as long as possible, even if they are uncomfortable or are unable to eat or communicate. Others would not want to be in those situations. How is it for you?"*

(Lum, Sudore, & Bekelman, 2015)

## Suggested Phrases for POLST Conversations

Begin with general discussion of health and goals of care. “How have things been for you lately?” “What are you hoping for with your illness?”

Introduce the form: “POLST documents your wishes for your care in serious medical situations. Health care providers anywhere you are treated will have to follow these instructions. You can decide to change your mind about your choices at any time.”

### Section A:

Describe CPR first. Caution that CPR rarely leads to survival for people who already have serious medical problems.

Then ask “If you have died a natural death, would you want us to try CPR?”

### Section B:

If answered yes to CPR, mark *Full Treatment* and say: “If we can get your heart beating again with CPR, you would next be in the ICU on a ventilator. If you weren’t getting better and you didn’t have a good chance of recovery, would you still want to be kept alive on life support? (If no, then select *Trial Period*)

If answered no to CPR, describe a “bad pneumonia” scenario with examples of the three different levels of treatment (ventilator, IV antibiotics, or comfort only).

Then ask: “If you were really sick would you want to be placed on the ventilator, with the primary goal of prolonging your life with all medically effective treatments? Does one of the other treatment plans sound better to you?”

### Section C:

Describe scenario of a “bad stroke” or advanced Alzheimer’s – unable to communicate or swallow. Present the option of feeding liquid food by mouth as tolerated vs. tube feeding. Caution that artificial feeding can be uncomfortable and does not prevent aspiration pneumonia.

“Would you want hand feeding to allow you to eat as best you can, or would you want artificial nutrition by a tube?”

Adapted from *The POLST Conversation* (Coalition for Compassionate Care of California, 2016)

## Appendix H

## Strengths, Weaknesses, Opportunities, and Threats

	Strengths	Weaknesses
Internal	<ul style="list-style-type: none"> <li>• OVM mission consistent with project</li> <li>• Strong relationship between USF and OVM</li> <li>• CANP conference presentation allowed intervention to reach NPs from different regions in California</li> <li>• OVM committed to continuing ACP as standard component of services</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of direct engagement with clinics serving homeless clients</li> <li>• Potential disagreement about ACP as priority intervention</li> <li>• Clinician time constraints</li> <li>• Difficult to measure impact of intervention, given the ongoing and individualized nature of ACP.</li> </ul>
	Opportunities	Threats
External	<ul style="list-style-type: none"> <li>• New Medicare/MediCal payment for ACP</li> <li>• New NP POLST authority</li> <li>• New Aid-In-Dying Law</li> <li>• Relationship between OVM and Marin County Department of Aging and Adult Services led to County request for ACP toolkits for public health nurses</li> <li>• Upcoming article in <i>Public Health Nursing</i> will potentially draw more attention to ACP needs of people who are homeless</li> </ul>	<ul style="list-style-type: none"> <li>• Controversy over homeless service provision in San Rafael</li> <li>• National political climate trending away from supporting health and social services</li> </ul>

Note: USF = University of San Francisco; OVM = Opportunity Village Marin; ACP = advance care planning; NP = nurse practitioner; POLST = Physician Orders for Life-Sustaining Treatment

Appendix I  
Project Budget

Expenses	Cost per intervention category			Totals
	Preparation phase	OVM	CANP	
Personnel time				
Project manager hours	150	120	60	330 hours
Clinician hours	0	25	37.5	62.5 hours
Total personnel hours				392.5 hours
Personnel time value				
DNP student (\$75/hour)	11250	9000	4500	\$24,700
Clinician (\$76/hour)	0	2014	2812.5	\$4,826.50
Total personnel time value				\$29,526.50
Out-of-Pocket Expenses				
POLST Training workshop	200			\$200
Coalition CCC Handouts	113			\$113
POLST forms	25			\$25
Five Wishes materials	63			\$63
Professional printing		32		\$32
Color printer	250			\$250
Folders, printer paper	15	35	20	\$70
Conference attendance			200	\$200



Conference lodging	661	\$661
Total out-of-pocket expenses		\$1614

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*Note:* Clinician time value based on NP mean hourly wage in San Francisco metro area, \$75.99 (Bureau of Labor Statistics, 2017). Project manager time value based on author's wage at current place of employment.

Appendix J  
Cost-Benefit Analysis

Cost/Revenue/Cost Avoidance Categories	Amount
Project costs	
Out of pocket expenses	1614
Personnel time value cost	29527
Total costs	31,141
Potential revenue sources	
ACP session (Medicare reimbursement)	86
ACP session (MediCal reimbursement)	70
Potential cost-avoidance examples	
ICU length of stay shortened X 1 patient	6,100
ICU admission avoided X 1 patient	38,000
Breakeven/Return on investment (ROI) examples	
ACP session (Medicare) X 362.1 sessions	breakeven
ACP session (MediCal) X 444.9 sessions	breakeven
ICU length of stay shortened X 5.1 patients	breakeven
ICU admission avoidance X 1 patient	Net Revenue: \$6859, ROI 0.22%
ICU admission avoidance X 3 patients	Net Revenue: \$82,859, ROI 3.66%

*Note:* Amounts rounded to nearest dollar. Medicare reimbursement based on incident to billing, NP direct reimbursement would be 15% lower (Centers for Medicare and Medicaid Services, 2016). Medi-Cal reimbursement rate obtained from State of California (2017). Cost-avoidance estimates based on analysis by Khandelwal et al., (2016). Breakeven = potential revenue or cost-avoidance that would equal total project cost, \$31,141.

## Appendix K

## Responsibility/Communication Matrix

Information	Target Audience	When	How	Responsible
Project planning	DNP advisor	As needed, approximately monthly	Phone, Skype, or Face-to-face at USF	DNP Student
Project planning	OVM Director	As needed, approximately bimonthly during preliminary stage	Phone, Skype/Facetime with email follow-up	DNP Student
Status updates on OVM clients, client visits	DNP student, OVM staff/volunteers	Alternate Friday afternoons	Face-to-face meetings at Marin County Health and Human Services office	OVM Director, DNP student
Client visit coordination	OVM staff/volunteers, OVM clients	As needed	Phone, email	DNP Student, OVM staff/volunteers
CANP presentation preparation	DNP advisor	As needed, approximately monthly	Face-to-face at USF, phone, email	DNP Student

## Appendix L

## Continuous Quality Improvement Model

The DNP student used the Institute for Healthcare Improvement ([IHI], 2015) Model for Improvement to structure this project. The Model's three key questions, displayed in the graphic below, were used to develop the project aim statements and measures. The Plan-Do-Study-Act framework was used during the DNP Student's initial period of individual ACP conversations with OVM clients. Learnings from those conversations were "studied" in order to "act" by developing the toolkit and the content of the seminars.



## Appendix M

## Evaluation Plan

Table 1

*Measure Descriptions*

Measure	Definition	Data Source	Goal
Outcome measures			
Knowledge	N: Sum total of content item points correct per seminar cohort D: Total # of tests with item complete per seminar cohort	Pre-test, Post-test Items 1 and 2 (see assessment documents for item detail)	Average post-test score > Average pre-test score
Confidence	N: Sum total of Likert-type scores on item 3 per seminar cohort D: Total # of tests with item 3 complete per seminar cohort	Pre-test, Post-test Item 3: “I feel confident in my ability to discuss end-of-life preferences and plans with patients/clients”	Average post-test score > Average pre-test score
Intention to change	N: Sum total of Likert-type scores on item 6 per seminar cohort D: Total # of tests with item 6 complete per seminar cohort	Post-test Item 6: “I plan to change my practice based on what I learned in this activity”	Average score > 3

Measure	Definition	Data Source	Goal
Process measures			
Tests returned	Number of tests returned at the conclusion of each seminar	Pre-test, Post-test	OVM: 3 pre-tests and 3 post-tests  CANP: 12 pre-tests and 12 post-tests
Seminar implementation	Number of seminars conducted	Project timeline	Implement 2 seminars by April 1
Balancing measure			
Barriers to ACP		Post-test item 8	Identify 2 barriers to changing practice

*Note:* N = numerator; D = denominator; OVM = Opportunity Village Marin; CANP = California Association for Nurse Practitioners

Table 2

*Data definitions*

Data element	Definition
Content item points correct	<p>Item 1:</p> <p>If 2 answers selected: 0 points</p> <p>If 3 answers selected: 1 point</p> <p>If 4 answers selected: 2 points</p> <p>Item 2:</p> <p>Answer a: 1 point</p> <p>Answer b: 1 points</p> <p>Answer c: 2 points</p> <p>Answer d: 0 points</p>
Per seminar	OVM and CANP are distinct intervention groups and will be scored separately.
Likert-type scores	<p>1 = Strongly disagree</p> <p>2 = Disagree</p> <p>3 = Neutral</p> <p>4 = Agree</p> <p>5 = Strongly agree</p>

*Note:* OVM = Opportunity Village Marin; CANP = California Association for Nurse Practitioners

## Appendix N

## Data Collection Instruments

## Advance Care Planning Pre-Intervention Assessment

1. Advance care planning is appropriate for: (Select all that apply)
  - a. older or seriously ill adults
  - b. vulnerable adults lacking stable housing
  - c. young adults in primary care settings
  - d. adults with history of mental illness or substance use
  
2. A 64 year-old male in transitional housing with severe congestive heart failure and COPD states that he does not want CPR under any circumstances and he hopes to never return to the hospital. The most appropriate form for his needs is: (Choose the best answer)
  - a. California Advance Health Care Directive
  - b. Five Wishes
  - c. POLST
  - d. none, the clinic visit note about the discussion is sufficient
  
3. I feel confident in my ability to discuss end-of-life preferences and plans with patients/clients.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1



## Advance Care Planning Post-Intervention Assessment

1. Advance care planning is appropriate for: (Select all that apply)
  - a. older or seriously ill adults
  - b. vulnerable adults lacking stable housing
  - c. young adults in primary care settings
  - d. adults with history of mental illness or substance use
  
2. A 64 year-old male in transitional housing with severe congestive heart failure and COPD states that he does not want CPR under any circumstances and he hopes to never return to the hospital. The most appropriate form for his needs is: (Choose the best answer)
  - a. California Advance Health Care Directive
  - b. Five Wishes
  - c. POLST
  - d. none, the clinic visit note about the discussion is sufficient

3. I feel confident in my ability to discuss end-of-life preferences and plans with patients/clients.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

4. Education content is relevant to my current practice.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

5. Education content achieved the learning objectives.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

6. I plan to change my practice based on what I learned in this activity.

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5	4	3	2	1

7. Please comment on specific changes in practice based on what you learned.

8. Please comment on barriers to changing your practice in this area.

We value your feedback.

Thank you for your participation!

## Appendix O

## Results

Measures	Data source	Goal	Outcome
Outcome measures			
Knowledge	Pre-test, Post-test Content points correct from items 1 and 2 See assessment documents for item detail.	Average post-test score > Average pre- test score	Both groups met the goal.  OVM: Average post- test score 3.67 > Average pre-test score 3
	Points possible: 4.		CANP: Average post- test score 3.65 > Average pre-test score 3.18
Confidence	Pre-test, Post-test Item 3: “I feel confident in my ability to discuss end-of-life preferences and plans with patients/clients” (Likert-type scale 1-5)	Average post- assessment score > Average pre- assessment score	Both groups met the goal.  OVM: Average post- test score 3.67 > average pre-test score 2.33
			CANP: Average post-test score 4.29 > Average pre-test score 3.59

Measures	Data source	Goal	Outcome
Intention to change	Post-test Item 6: “I plan to change my practice based on what I learned in this activity” (Likert-type scale 1-5)	Item 6 Average post-test score > 3	Both groups exceeded the goal.  OVM: 4.67  CANP: 4.29
Process measures			
Tests returned	Pre-test, Post-test	OVM: 3 pre-tests and 3 post-tests  CANP: 12 pre-tests and 12 post-tests	OVM: met goal with 3 pre-tests and 3 post-tests returned  CANP: exceeded the goal with 17 pre-tests and 17 post-tests returned
Seminar implementation	Project timeline	Implement 2 seminars by April 1	Met goal. OVM seminar 3/3/17 CANP seminar 3/19/17
Balancing measure			
Barriers to ACP	Post-test item 8	Identify 2 barriers to changing practice	Met goal. Barriers identified: 1. Time 2. Patient discomfort with topic

*Note.* Likert-type scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. OVM = Opportunity Village Marin; CANP = California Association for Nurse Practitioners; ACP = advance care planning;

## Appendix P

## Quantitative Data

Table 1

*Opportunity Village Marin Seminar Pre-test Scores*

Participant	Knowledge items		Confidence item
	Item 1	Item 2	Item 3
1	2	1	2
2	2	1	1
3	2	1	4

*Note.* Item 1 maximum points = 2; Item 2 maximum points = 2; Item 3: 1 = strongly disagree, 2 = Disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Table 2

*Opportunity Village Marin Seminar Post-test Scores*

Participant	Knowledge items		Confidence item	Intervention quality and relevance items		Intention to change
	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6
1	2	2	4	5	5	5
2	2	2	4	5	5	5
3	2	1	3	4	5	4

*Note.* Item 1 maximum points = 2; item 2 maximum points = 2; items 3-6 Likert-type scale 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. \* = no response

Table 3

*California Association for Nurse Practitioners Seminar Pre-test Scores*

Participant	Knowledge items		Confidence item
	Item 1	Item 2	Item 3
1	1	1	3
2	2	1	2
3	2	2	5
4	2	2	3
5	2	1	3
6	2	2	5
7	0	1	3
8	2	2	5
9	2	1	4
10	2	1	2
11	2	1	4
12	2	2	3
13	1	2	3
14	2	1	3
15	2	1	3
16	2	1	5
17	2	2	5

*Note.* Item 1 maximum points = 2; Item 2 maximum points = 2; Item 3: 1 = strongly disagree, 2 = Disagree, 3 = neutral, 4 = agree, 5 = strongly agree

Table 4

*California Association for Nurse Practitioners Seminar Post-test Scores*

Participant	Knowledge items		Confidence item	Intervention quality and relevance items		Intention to change item
	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6
1	1	2	4	5	5	*
2	2	2	4	5	5	4
3	2	2	5	5	5	*
4	2	2	5	5	5	5
5	2	2	4	5	5	5
6	2	2	4	4	5	*
7	2	2	5	5	5	2
8	2	2	5	5	5	3
9	2	2	4	5	5	4
10	1	1	4	5	5	4
11	2	1	5	5	5	*
12	2	2	4	5	5	5
13	2	2	4	5	4	4
14	2	1	4	5	5	4
15	2	2	4	5	5	5
16	2	2	4	4	5	5
17	1	2	4	4	4	4

*Note.* Participant numbers from pre-test do not correspond to participant numbers from post-test.

Item 1 maximum points = 2; item 2 maximum points = 2; items 3-6 Likert scale 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. \* = no response



## Appendix Q

## Qualitative Data

Items 7 and 8 on the post-test were open response items. Prompts and the participant responses from each group are listed in full below.

**Post-test item 7: Please comment on specific changes in practice based on what you learned.**

CANP Participant responses:

“Start talking about advanced directives, give handouts.”

“Ensuring I ask about this with patients that are not elderly”

“Using CPR description of ‘bringing you back from death’”

“Reminded re: advanced care directives”

“Bring up topic with clients”

“Communicating with patients on a regular basis. Asking about wishes. Asking about advanced care planning.”

“Explain the POLST in greater detail”

“Just the intent to begin asking the questions about end of life wishes”

OVM Participant responses:

“Conversation tips and phrases are very practical that I can implement in my next visit right away!”

“Perspectives have increased.” “Learned how to bring about EOL conversations, many M.I. tips that I can utilize” “loved the tips!”

“Love this new learning! Is there something else vs. is there anything else”

**Post-test item 8: Please comment on barriers to changing your practice in this area.**CANP Participant responses:

“Time”

“Time. EMR documentation.”

“Time. Patient comfort.”

“Ensuring the clinic is seen as not scary. A lot of patients at my clinic have been ‘fired’ from other practices and I don’t want to scare them away at the first visit. I might bring this up later with some patients at subsequent visits after establishing rapport.”

“Time. Personnel to help client complete form”

“Time during routine visits”

“Patients are not always willing to make an additional visit to talk about ACP”

“Patients don’t return POLST after they take home to think”

OVM Participant responses:

“Time is always the challenge! Also, it takes so much time to build trust especially in this population with so much distrust in system in general”

“Slightly different than conversations I’ll have. However, my barriers are personal (more in confidence). EOL is not a comfortable conversation for anyone! “

“A big challenge is time . . . this conversations has to be initiated and then continued over time to be integrated into a goal that’s achieved”

**Other comments:**

CANP participant: “Excellent talk”

OVM participant: “Info presented clearly, easy to follow! I don’t have any EOL knowledge, so it was great and interesting. Practice scenarios were definitely useful and applicable.”